



Ontario

ENVIRONMENTAL ASSESSMENT BOARD

VOLUME:

83

DATE:

Wednesday, March 29th, 1989

BEFORE:

M.I. JEFFERY, Q.C., Chairman

E. MARTEL, Member

A. KOVEN, Member



FOR HEARING UPDATES CALL (TOLL-FREE): 1-800-387-8810

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HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL
RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR
TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental
Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental
Assessment for Timber Management on Crown
Lands in Ontario;

- and -

IN THE MATTER of an Order-in-Council
(O.C. 2449/87) authorizing the
Environmental Assessment Board to
administer a funding program, in
connection with the environmental
assessment hearing with respect to the
Timber Management Class
Environmental Assessment, and to
distribute funds to qualified
participants.

Hearing held at the Ramada Prince Arthur
Hotel, 17 North Cumberland St., Thunder
Bay, Ontario, on Wednesday, March 29th,
1989, commencing at 9:30 a.m.

VOLUME 33

BEFORE:

MR. MICHAEL I. JEFFERY, Q.C.	Chairman
MR. ELIE MARTEL	Member
MRS. ANNE KOVEN	Member

A P P E A R A N C E S

MR. V. FREIDIN, Q.C.)	MINISTRY OF NATURAL
MS. C. BLASTORAH)	RESOURCES
MS. K. MURPHY)	
MS. Y. HERSCHER)	
MR. B. CAMPBELL)	MINISTRY OF ENVIRONMENT
MS. J. SEABORN)	
MR. R. TUER, Q.C.)	ONTARIO FOREST INDUSTRY
MR. R. COSMAN)	ASSOCIATION and ONTARIO
MS. E. CRONK)	LUMBER MANUFACTURERS'
MR. P.R. CASSIDY)	ASSOCIATION
MR. J. WILLIAMS, Q.C.	ONTARIO FEDERATION OF
MR. B.R. ARMSTRONG	ANGLERS & HUNTERS
MR. G.L. FIRMAN	
MR. D. HUNTER	NISHNAWBE-ASKI NATION and WINDIGO TRIBAL COUNCIL
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MS. M. SWENARCHUK)	FORESTS FOR TOMORROW
MR. R. LINDGREN)	
MR. P. SANFORD)	KIMBERLY-CLARK OF CANADA
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MS. B. LLOYD)	

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MR. J.W. ERICKSON, Q.C.) MR. B. BABCOCK)	RED LAKE-EAR FALLS JOINT MUNICIPAL COMMITTEE
MR. D. SCOTT) MR. J.S. TAYLOR)	NORTHWESTERN ONTARIO ASSOCIATED CHAMBERS OF COMMERCE
MR. J.W. HARBELL) MR. S.M. MAKUCH)	GREAT LAKES FOREST
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MR. P.D. McCUTCHEON	GEORGE NIXON

(iii)

APPEARANCES: (Cont'd)

MR. C. BRUNETTA

NORTHWESTERN ONTARIO
TOURISM ASSOCIATION

(iv)

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<u>PETER PHILLIP HYNARD,</u>	
<u>JOHN TRUMAN ALLIN,</u>	
<u>RICHARD BRUCE GREENWOOD,</u>	
<u>CAMERON C. CLARK,</u>	
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1 ---Upon commencing at 9:40 a.m.

2 THE CHAIRMAN: Good morning, ladies and
3 gentlemen. Please be seated.

4 Ladies and gentlemen, the Board
5 apologizes for having to cancel out yesterday's
6 session. I think we have been relatively fortunate
7 this winter in really missing only one day on account
8 of weather conditions. These things happen from time
9 to time and obviously there is no choice on the part of
10 the Board in terms of not being able to sit if all
11 three members are not present.

12 We distributed during the break a
13 scheduling notice dated March 9th - I think the last
14 one was March 9th - and, unfortunately, there is one
15 additional change that arose as the result of my being
16 asked to participate in an advisory group set up by the
17 Federal Law Reform Commission dealing with
18 administrative law.

19 As a result, I will be unable to attend
20 the hearing on May the 11th and what we are suggesting
21 for that one week is to come in the Sunday evening so
22 that we might start on May 8th - that's the evening of
23 the 7th - at 9:00 a.m. in the morning.

24 Now, unless that poses some particular
25 difficulties for any of the parties, we would like to

1 ask your indulgence to be able to start on that Monday
2 at 9:00 a.m. and in that way make up some of the lost
3 time that week. Is that any problem for anybody
4 particularly?

5 (No response)

6 Very well. Other than that, we believe
7 that the days scheduled on that last scheduling notice
8 reflect what should happen until the summer break at
9 the end of June.

10 Now, having said that, we now have a
11 letter dated March 17th from the Ministry of Natural
12 Resources with respect to the proposal for the site
13 visit. And as most of you are aware, I think this has
14 been distributed, Mr. Freidin, to everyone -- or Ms.
15 Murphy?

16 MS. MURPHY: Yes, Mr. Chairman, that was
17 sent out.

18 THE CHAIRMAN: The site visit is
19 suggested for the week of May 23rd through May 26th.

20 The Board has reviewed this document and
21 finds it to be in order as far as the Board is
22 concerned. As all of you are aware, there will be
23 additional site visits from time to time and we may
24 well revisit some of the areas previously visited and
25 see other activities that we have missed and that

1 certain parties have requested, so that this doesn't
2 mean this will be necessarily the only visit to the
3 Temagami area, for example.

4 The one other thing that we might put to
5 you, Ms. Murphy, is the Board's desire at some point to
6 see a prescribed burn. It may be too early in May - we
7 realize it is the early spring and the wetness may
8 preclude a prescribed burn at that time - but at some
9 point the Board would like to view a prescribed burn if
10 possible.

11 MS. MURPHY: Mr. Chairman, it was our
12 understanding that once this visit was over there would
13 be some outstanding matters and activities that you
14 would not have had an opportunity to see. A prescribed
15 burn, of course, is one of them.

16 I suspect with that particular request it
17 will likely be a situation where we will have to keep
18 our eyes open for one that might happen because, as you
19 are aware, it depends very much on weather conditions
20 and perhaps look for one that we could visit on a day
21 trip from Thunder Bay.

22 THE CHAIRMAN: Very well.

23 MS. MURPHY: With respect to the site
24 visit then there were a couple of things I would like
25 to mention. I had suggested in the letter that the

1 Board then give directions as to the dates for people
2 to put in their submissions for items of interest and I
3 had suggested April 22nd which would have given
4 slightly more than three weeks from today which is
5 fine, except that I note now in looking at my diary
6 that April 22nd is a Saturday. So that is probably not
7 such a wise idea.

8 So you might want to consider April 21st
9 or 24th for a date for persons to submit to the Board
10 and to MNR their suggestions for items of interest and
11 their proposals for this visit.

12 We would also ask that people be directed
13 to advise on the same date the names of the persons who
14 would attend. It is very important for us to know,
15 particularly for this visit, how many people will
16 attend given the travel arrangements for this one are
17 going to be a little bit more complicated.

18 THE CHAIRMAN: All right. The Board, Ms.
19 Murphy, would like to set April 24th as the date for
20 those submissions and we would also ask parties to
21 advise Ms. Murphy as to whether or not various persons
22 will attend and, if possible, the names of those
23 persons.

24 MS. MURPHY: That's fine. The idea then
25 would be, according to this proposal, that the Ministry

1 would pick up the visitors in North Bay and the
2 Ministry will undertake the transportation from that
3 time forward until the end of the visit in Kapuskasing,
4 is the proposal, and that we would ask people to
5 arrange their own transportation from Kapuskasing back
6 to wherever they intend to go.

7 Other than that, I think all of the
8 details are really dealt with in the letter and in the
9 proposed itinerary.

10 THE CHAIRMAN: Very well. Mr. Martel is
11 just advising that transportation out of Kapuskasing is
12 not the easiest or best in the world.

13 MS. MURPHY: Well, actually we did look
14 at some of the available transportation. Maybe we
15 would review that and give you a list of the things
16 that are available.

17 MR. MARTEL: To get people back to
18 Timmins even, which is a much more central location.

19 MS. MURPHY: The difficulty is once we
20 know who is coming and where people have to go and what
21 transportation we will have provided in the interim,
22 then we might be able to deal with some individual
23 situations, certainly.

24 THE CHAIRMAN: Okay. Well, why don't we
25 leave it at least until April 24th when you have an

1 indication of how many are going to be attending and
2 then we can deal with where we will end up on the 26th
3 of May.

4 MS. MURPHY: Fine.

5 THE CHAIRMAN: Thank you.

6 MS. MURPHY: There was a second matter,
7 Mr. Chairman, arising from my letter of March 22nd with
8 respect to the scoping meetings for Panels 12 and 13.
9 Would it be possible to deal with that this morning as
10 well?

11 THE CHAIRMAN: Yes, we can certainly deal
12 with the question this morning as to whether or not
13 these two scoping sessions for the two panels should be
14 held simultaneously. The Board -- and we will listen
15 to submissions by other counsel in a moment, Mr.
16 Cassidy.

17 MR. CASSIDY: I wasn't going to speak
18 about the scoping right now. I just wanted to make one
19 comment in respect of the site visit.

20 THE CHAIRMAN: All right.

21 MR. CASSIDY: It is a very
22 straightforward comment. I have been approached and
23 contacted by Ms. Nicols, who is counsel for Spruce
24 Falls Power and Paper who have a facility in
25 Kapuskasing and she has asked me to put on the record

1 and advise you that that company looks forward to the
2 site visit taking place in the Kapuskasing area and
3 wants me to advise you that they want to welcome you to
4 that area and they look forward to site visit process,
5 so consider it done.

6 THE CHAIRMAN: Very well. With respect
7 to the scoping issues, Ms. Murphy, the Board has no
8 objection to holding the two scoping sessions for the
9 two panels simultaneously. In fact, in accordance with
10 the submissions made in your letter it appears to make
11 some eminent sense to do so.

12 With respect to the questions of whether
13 or not this Board would have the jurisdiction to deal
14 with matters which are regulated by other agencies,
15 both federal and provincial, that is a question that
16 the Board I think would have to and would encourage
17 parties to make submissions on.

18 I think there is a jurisdictional issue
19 involved and it is one that I think some of the parties
20 may wish to take differing positions on and the Board
21 would like to hear submissions from counsel - not today
22 obviously because I don't think counsel are in a
23 position to do so - on those points because it will, I
24 think, make some difference as to certainly the focus
25 of the evidence with respect to pesticides as to

1 whether or not we are going to get into questions as to
2 whether or not approvals already given or
3 classifications already made by other bodies or
4 agencies are also going to be the subject of
5 examination and submissions by counsel and parties to
6 this proceeding itself.

7 And, of course, that leads to the
8 question as to whether or not this Board has the
9 jurisdiction to deal with matters which are regulated
10 by other agencies.

11 MS. MURPHY: Precisely. For that reason,
12 Mr. Chairman, we wrote this letter and what we had
13 asked for in the letter was that you would give
14 directions that the scoping meetings for Panels 12 and
15 13 would be held together.

16 At the present time, I understand that's
17 scheduled for April 24th and that people are required
18 to put in their statements of issues by April 13th,
19 that is my understanding of the current situation. And
20 so our request would be that you combine those two
21 meetings and that specifically you ask people who are
22 putting in their statements of issues to speak directly
23 to the paragraphs that are noted in the letter.

24 And if you will see at the end of my
25 letter on page 3, if you look at the second to last

1 paragraph, it advises that we will ask the EA Board to
2 give directions that the statements of issues to be
3 filed with respect to these panels should make specific
4 reference to paragraphs 1 to 3 of MNR's Panel 12
5 statement of evidence and paragraph 1 of the Panel 13
6 statement of the evidence indicating the party's
7 agreement with those specific paragraphs or their
8 disagreement with those paragraphs together with the
9 reasons for any disagreement.

10 This is our opportunity, as we see it, to
11 actually bring these issues forward and have them dealt
12 with. And, as we advised in that letter, if there is
13 significant disagreement on these issues we will ask
14 the Board to hear argument on the matter and make a
15 ruling on the scope of the hearing.

16 So we think this is one of the main
17 values of attempting to do things this way and deal
18 with these issues as directly as possible.

19 Now, I understand Mr. Lindgren, as you
20 will be aware, there is a draft Notice of Motion
21 dealing with similar matters. Mr. Lindgren did want to
22 take a minute to speak to that matter and I expect the
23 timing of the Notice of Motion or the return of that
24 motion should be considered as something that should be
25 put together with perhaps these steps.

1 So I think if Mr. Lindgren wants to speak
2 to his Notice of Motion, I think he is looking for a
3 date and then I think we will have some -- maybe some
4 discussion on the notice requirements and response
5 requirements from the various parties.

6 THE CHAIRMAN: Very well. Mr. Lindgren,
7 I don't think we have anything before us on your motion
8 at this point, do we?

9 MR. LINDGREN: Not yet, but you will very
10 shortly. I would like to indicate at the outset that
11 we do not have a problem with the proposal to combine
12 the scoping sessions for the panels, but there may be a
13 problem in terms of the date for the scoping session.

14 It is our intention to bring a motion
15 relating to the evidence to be called during these two
16 panels. And yesterday I did distribute copies of the
17 draft notice to some of the parties that were in
18 attendance. I would like to circulate copies to the
19 Board and perhaps ask for directions on a few key
20 matters.

21 THE CHAIRMAN: Well, do you want to take
22 us through this briefly?

23 MR. LINDGREN: That wasn't my intention.
24 You will see that in essence what we are asking for is
25 an order compelling the Ministry to call evidence

1 relating to the human health effects of some of the
2 pesticide products that are being -- or rather proposed
3 for use in the area of the undertaking. I think this
4 ties in very directly to the concern that you expressed
5 earlier about jurisdictional matters.

6 Perhaps I could ask for directions
7 concerning the date and time. It is our suggestion
8 that this motion be made returnable on April 24th which
9 is in fact the date of the proposed scoping session. I
10 should advise the Board that Mr. Castrilli will be
11 arguing this motion and he is not available from the
12 13th to the 18th of April, but he will be in attendance
13 on the 24th if in fact that is the date that's been
14 set.

15 In terms of the time, we would suggest
16 that the motion be made returnable at 1:00 p.m. in the
17 afternoon not at ten o'clock as set out in the draft
18 notice.

19 With respect to service, we would ask
20 that the Board permit service by regular first class
21 mail as was the case during our last formal motion. It
22 is our intention -- if we obtain a date and a time
23 today, it is our intention to send these out from
24 Toronto to all the parties on the full-time -- to all
25 the full-time parties on the most recent parties list,

1 and I believe that if we do set a date of April 24th
2 that should allow sufficient time for both the mail
3 service and the required three day notice period.

4 It wasn't my intention to address the
5 substance of the motion, but I should mention that if
6 this motion or if the relief that we are requesting is
7 granted by the Board, it should not unduly delay the
8 proceedings. I believe Mr. Castrilli has a proposal
9 that would allow the hearing to continue in its normal
10 course without substantially delaying the process.

11 In short, we would submit that the Panel
12 12 and 13 scoping sessions and the evidence could be
13 called as it normally would, subject to the subsequent
14 scoping and calling of a witness who could speak to the
15 human health effects. I don't believe this is a time
16 for me to argue the substance of the motion and I will
17 leave it to Mr. Castrilli to fill in the details about
18 this proposal.

19 So those really are my comments at this
20 time.

21 THE CHAIRMAN: Okay. Well, just after a
22 cursory look at this Notice of Motion it appears to the
23 Board that we should be really dealing with the
24 jurisdictional issues prior to dealing with this motion
25 because I think that this motion substantively will

1 depend on whether the Board has concluded it does or
2 does not have jurisdiction to go into some of these
3 questions raised.

4 And, for instance, if it did decide it
5 had jurisdiction, then it may be in a position to hear
6 submissions on whether or not a particular witness
7 should be called or whether the Board should be calling
8 its own witness for those questions mentioned in your
9 motion.

10 It seems to us that if the Board
11 concludes that it does not have the jurisdiction to go
12 into some of the questions concerning pesticides to the
13 extent that some of the parties would like to have
14 those issues addressed, that it may preclude the Board
15 or one of the parties calling this type of witness.

16 So I think what we are trying to say is
17 we have to really delineate the scope of the pesticide
18 evidence to be addressed at the hearing prior to
19 dealing with your specific motion. That's not to say
20 that we can't deal with them simultaneously. What I am
21 suggesting is, is that perhaps we deal with the
22 jurisdictional arguments first and then deal
23 immediately thereafter with your motion.

24 Ms. Murphy?

25 MS. MURPHY: Well, Mr. Chairman, it

1 occurs to me that the motion itself as it is put
2 forward does deal with jurisdiction. I don't know that
3 it is really necessary to stagger the thing and look to
4 at it as if it's a series of different concepts.

5 While the motion itself is asking for
6 something specific it does so on the basis that it is
7 assuming jurisdiction and I can advise that the
8 response, at least on our part, would be to say there
9 is no jurisdiction. So that dealing with this motion
10 in itself would raise that issue in any event.

11 THE CHAIRMAN: All right. Well, I am not
12 suggesting we have to deal with them on separate days
13 or anything else, it is just that we would like to get
14 the jurisdictional questions firmly in our minds and
15 the submissions before us before we would deal with any
16 specific request concerning witnesses which, as you
17 indicate, assumes that we have jurisdiction.

18 MS. MURPHY: That's right. And this is
19 why I was concerned that at the present time the idea
20 is that people would provide their statements of issues
21 with respect to these two panels, as I understand it
22 now, on the 13th of April.

23 I would submit that it is that step that
24 is going to allow any of the other related issues to
25 surface so that all of them can be dealt with sort of

1 together and perhaps that that's really the first step
2 is to say: There will be a scoping meeting on the
3 24th, prior to that on the 13th - if that's the date
4 that you eventually choose - all parties will be
5 required to put forward their position and particularly
6 their positions on these matters. And that being the
7 case, we would be able to look at the various positions
8 and deal with the whole question at one time perhaps on
9 the 24th, perhaps shortly thereafter.

10 THE CHAIRMAN: Well, the question that
11 arises as to the timing, given the fact that we will be
12 doing the scoping for two of the panels simultaneously:
13 Do the parties have any difficulties with dealing with
14 these matters on the 24th with the statements of issues
15 being filed by the 13th of April of both panels.

16 MS. MURPHY: If I just might add, I would
17 also submit that if this is going to be -- if we are
18 going to find the most expeditious way to carry out
19 this and look at this sort of all in one piece, then
20 perhaps it would be wise to consider having at least
21 those people represented by counsel deal with these
22 matters when they put in their statements of issues in
23 the form of a factum if they are going to be dealing
24 with law, put in statements of fact and law upon which
25 they rely in order to take those positions that they

1 would be putting forward.

2 THE CHAIRMAN: Well, certainly if that
3 were the case I think expecting that by the 13th is
4 perhaps too optimistic.

5 MR. CASSIDY: Well, the concern I have
6 about that, Mr. Chairman, is that - and while it may
7 sound like a very good idea, I have to have something
8 to respond to and this is a motion which they are
9 bringing. I don't want to have to draft a factum out
10 of the blue air trying to anticipate what they are
11 going to do.

12 If we are going to go through that
13 process, I think Mr. Lindgren or Mr. Castrilli should
14 first be required to provide us with a clear statement
15 of what their view is on the jurisdiction. Ms. Murphy
16 is right, there is an assumption here but I don't want
17 to have to respond to assumptions, I would like to hear
18 a clear statement from them before I respond because
19 this is a matter that is very important to my clients.

20 THE CHAIRMAN: Well, the Board is really
21 I think of the view that this whole question of
22 jurisdiction is one of some substance and we don't want
23 to be put into the position of having to make a
24 decision on this without being fully apprised of (a)
25 the positions of all the parties, and (b) what the

1 relevant law is on the subject and the issues before
2 us.

3 And although the Board in the past has
4 not required written submissions with respect to
5 matters brought forward by way of motion, I think this
6 is one of those situations where it would be extremely
7 helpful both to the Board and other parties and,
8 therefore, I think two things could occur based on what
9 you have just said Mr. Cassidy.

10 Certainly Mr. Lindgren -- I think it
11 would be helpful if Mr. Castrilli did put forward by
12 way of supporting material his position and the basis
13 upon which this motion is formulated so that the other
14 parties would have an opportunity to respond to that
15 and also, Ms. Murphy, the Ministry obviously has a
16 position as well--

17 MS. MURPHY: Yes.

18 THE CHAIRMAN: --in terms of this and
19 perhaps it might be helpful if the Ministry put forward
20 its position in writing.

21 MS. MURPHY: Yes. Mr. Chairman, I would
22 submit the Ministry has put forward its position in
23 those paragraphs that were put into those statements of
24 evidence, Panels 12 and 13. We certainly, of course,
25 intend to respond to the motion and to file a statement

1 of fact and law.

2 I did have a question and perhaps -- I
3 just missed this date, maybe Mr. Lindgren can help me,
4 but I understood that he had said there was some date
5 that he thought he would have to put something in the
6 mail for proper service and I missed that.

7 THE CHAIRMAN: Well, he was talking about
8 the actual Notice of Motion itself.

9 MS. MURPHY: Yes.

10 THE CHAIRMAN: Suggesting that he
11 would -- depending on which date we picked, he would
12 serve the thing by ordinary mail on the most up-to-date
13 full-time parties list immediately for instance if we
14 picked the date of the 24th. Was that correct?

15 MR. LINDGREN: That's correct.

16 THE CHAIRMAN: Well, I think what the
17 Board is suggesting though, Mr. Lindgren, is, is that
18 in addition to the Notice of Motion, supporting
19 material should also accompany it so that the parties
20 would be able to respond appropriately at the date set
21 for the return of the motion.

22 I think what we are getting at, Ms.
23 Murphy, is although your position is set forward in
24 your witness statement, we would like to also have a
25 factum of law on the issue to again assist the Board

1 and parties in addressing this on the return of the
2 motion.

3 MS. MURPHY: No question. My difficulty
4 is this: This may well not be the only matter or the
5 only aspect of this matter that's raised when people
6 look at Panels 12 and 13. That's the very reason why
7 we have asked specifically that when parties draft
8 their statement of issues for Panels 12 and 13 they
9 specifically state what their position is with respect
10 to those paragraphs and to the extent they disagree
11 their reasons for that. It is that whole piece that we
12 would like to respond to and we certainly intend to do
13 that.

14 ---Discussion off the record

15 THE CHAIRMAN: All right. The Board is
16 suggesting that with respect to the statement of issues
17 for both panels that we extend the time for submitting
18 the statements to the 24th of April and at the same
19 time I think Mr. Lindgren could arrange for the service
20 of this Notice of Motion immediately -- well, not
21 immediately because we would like as well a factum of
22 fact and law to go with it.

23 How long do you think you would need or
24 Mr. Castrilli would need to prepare that, Mr. Lindgren?

25 MR. LINDGREN: Well, as I indicated

1 earlier, Mr. Castrilli will be unavailable for a week
2 from the 13th to the 18th. Perhaps by the 13th we
3 might be in a position to prepare and serve a factum.
4 It may be advisable to send out the Notice of Motion
5 today with a covering letter that indicates that a memo
6 of factum will be served shortly.

7 THE CHAIRMAN: All right. So why don't
8 we do this, we direct that the Notice of Motion will be
9 served immediately by ordinary mail to the most recent
10 full-time parties list.

11 MS. MURPHY: Perhaps it should indicate
12 on a date to be set--

13 THE CHAIRMAN: Right.

14 MS. MURPHY: --for the return of the
15 motion.

16 THE CHAIRMAN: On a date to be set for
17 the return of the motion, with a covering letter
18 indicating that a statement of fact and law will follow
19 by the 13th of April. And I think in order to expedite
20 things, the factum should be sent by courier and that
21 will have everything concerning the motion in the
22 parties' hands shortly after April the 13th.

23 MR. LINDGREN: Sorry, just for
24 clarification: Are you saying that we won't be arguing
25 this motion on the 24th?

1 THE CHAIRMAN: No. What we are
2 suggesting is as a result of the parties receiving this
3 material by say the 14th or 15th of April, complete
4 with respect to your motion, I think to argue it on the
5 24th would not allow the parties enough time to fully
6 respond.

7 And so, therefore, we would have to set
8 back the return of the motion until a date subsequent
9 to April 24th and I guess what is left at this point is
10 to pick an appropriate date.

11 MR. CASSIDY: Maybe I can --

12 MS. MURPHY: Could I try -- oh.

13 MR. CASSIDY: I'll let Ms. Murphy
14 proceed.

15 MS. MURPHY: Right.

16 MR. CASSIDY: Do you want to try?

17 MS. MURPHY: Because there are just a few
18 other steps here and maybe I can -- as I understand it,
19 the Notice of Motion would be served immediately
20 indicating a date to be set, a factum would be required
21 on or about the 13th, then the statement of issues of
22 the other parties would be due on the 24th of April.

23 May I suggest then that there are at
24 least two more steps and may I suggest that would
25 happen then is as follows: After the factum is

1 received and after the statements of issues are
2 received at that point - and we would have to look at
3 perhaps, I don't know, maybe a week or something - the
4 Ministry of Natural Resources and all other parties
5 would have the opportunity to then respond by way of
6 factum so that all the material then would be pulled
7 together prior to the arguing of any motion.

8 THE CHAIRMAN: That's correct.

9 MR. CASSIDY: Maybe there is some merit,
10 Mr. Chairman, having the statement of issues and a
11 factum filed together by the responding parties at once
12 rather than have one deadline for statement of issues
13 and one deadline for the factum because it may be
14 appropriate to deal with some issues in the statement
15 of issues and respond by way of factum to Mr.
16 Lindgren's motion.

17 Perhaps I could make the suggestion that
18 we put the deadline for the statement of issues off to
19 the same date that we put off to the responding factums
20 and I am thinking that if we had one deadline for both
21 of those things it would facilitate everybody working
22 towards that and you would have all the materials at
23 once.

24 And you indicated earlier this morning
25 that we if started on May 8th, that may be a convenient

1 date to either have the scoping session and the
2 argument or, in the alternative, set that date as the
3 date for filing our material.

4 THE CHAIRMAN: Well, in accordance with
5 what you have just suggested, Mr. Cassidy, would it
6 make sense then to have the return -- have the filing
7 of the statements of issue and the responding factums
8 on April 24th?

9 MR. CASSIDY: Speaking for myself, Mr.
10 Chairman, I am not in a position to agree to that
11 simply because I haven't seen Mr. Lindgren's materials
12 and that would only give me approximately 11 days to
13 respond by way of a factum.

14 THE CHAIRMAN: And you don't think that
15 is sufficient?

16 MR. CASSIDY: Pardon me?

17 THE CHAIRMAN: You don't feel that is
18 sufficient?

19 MR. CASSIDY: In the absence of seeing
20 what he comes up with I can't state that that is
21 sufficient. I would ask for further time.

22 MR. LINDGREN: Mr. Chairman, I would like
23 to point out that we are getting approximately 11 days
24 to prepare our factum.

25 MR. CASSIDY: You have been thinking

1 about putting in that motion. I got notice of this
2 motion yesterday, Mr. Chairman.

3 THE CHAIRMAN: All right. Can the Board
4 make this suggestion: That the responses by way of
5 factum from the other parties be filed no later than
6 April 27th.

7 MS. MURPHY: Well, fine. My difficulty
8 is that, as I understand it, the Ministry of Natural
9 Resources would be responding not just to this motion
10 but to the statements of issues. So that if the 27th
11 is acceptable to the other parties, that is fine, we
12 would like at least a week longer than that so we can
13 respond not only to this motion but to any other
14 issues.

15 That was the point of asking people to
16 put in their statements of issues.

17 THE CHAIRMAN: All right. Then if you
18 responded by the 4th of April -- sorry, of May and we
19 then set May 8th as the date to deal with all of this,
20 it should accommodate everyone, except Ms. Seaborn?

21 MS. SEABORN: Well, Mr. Chairman, I would
22 just like to go back to your first comment when we got
23 into the issue of combining 12 and 13 and looking at
24 the Notice of Motion in terms of while the issues --
25 some of the issues will be the same, there will be some

1 issues that will be different. And it seems to me that
2 what is important for everyone to know is what the
3 parties' response is to MNR's evidence. And so for
4 that reason I would say that the statement of issues
5 should be filed in the normal course where the parties
6 say they are either in dispute -- either dispute or
7 they are in agreement with particular paragraphs of
8 MNR's evidence. That way we would all know before we
9 even got into the motion where parties stood in terms
10 of MNR's evidence.

11 There is going to be, at the scoping
12 session, other issues that we will presumably deal with
13 that are outside the motion in terms of what areas
14 parties want to cross-examine on, so it would be my
15 inclination to suggest that the parties file their
16 statement of issues in the normal course by April 13th,
17 they not need be any longer than they have been in the
18 past, that way MNR and all parties would know where the
19 major disagreements are with the evidence.

20 We would then have argument on the motion
21 and the scoping session on the same date and it may be
22 that that date should be put off to May, I agree with
23 that, in order to allow time for Mr. Castrilli to file
24 a motion record or factum or whatever it is he has in
25 mind and on a date set by the Board before the return

1 of the motion - maybe three days - all other parties
2 would have to file material responding to Mr.
3 Castrilli's.

4 But I don't -- I think that for
5 simplicity in dealing with the rest of the evidence and
6 so as not to elevate this issue and ignore all of the
7 other evidence in Panels 12 and 13 the statement of
8 issues should just go out in the normal course and need
9 not be legal arguments.

10 MR. CASSIDY: Well, Mr. Chairman, might I
11 respond to that. The concern I have is that what I may
12 say in my statement of issues may reflect what the
13 nature of this motion is about as well. I think you
14 were right that there is some real interconnection here
15 between the two matters and I may, if I am required to
16 provide a statement of issues as Ms. Seaborn suggests
17 by April 13th and then on or about that same day I get
18 a factum from Mr. Lindgren which alters my position--

19 THE CHAIRMAN: It may generate a second
20 statement of issues in effect.

21 MR. CASSIDY: I think we are generating
22 more work for ourselves.

23 THE CHAIRMAN: And I think the Board
24 feels that the matters are interconnected to such an
25 extent that we should be dealing with all of the

1 issues, including the jurisdictional issue which is
2 really at the substance of your motion, at one time.
3 And it seems to the Board that the dates that we have
4 suggested will allow parties sufficient time to respond
5 in a fashion suggested; that is, statements of issues
6 in the normal course, supplemented by facts of fact
7 and law concerning the jurisdictional questions and
8 then dealing with everything on May 8th.

9 MS. SEABORN: In terms of the date, Mr.
10 Chairman, parties may need a day or two to check. I am
11 not sure if Mr. Castrilli is available on that date.
12 Mr. Campbell may want to be here on May 8th, I am not
13 sure of his availability. I can let the Board know if
14 there is a problem with that.

15 MR. LINDGREN: Mr. Chairman, I have the
16 same concern as well. It is my understanding that Mr.
17 Castrilli will be out of the country for a large
18 portion towards the end of May and I think he quite
19 likely would like to have this argument heard and
20 determined before that time, if that is at all
21 possible.

22 THE CHAIRMAN: Well, we are certainly
23 suggesting towards the beginning of May; that is, May
24 8th.

25 MR. LINDGREN: That would be the return

1 date of the motion?

2 THE CHAIRMAN: That would be the return
3 date of the motion as well as--

4 MS. MURPHY: The scoping session.

5 THE CHAIRMAN: --the scoping sessions,
6 they would follow and be intertwined with each other.

7 MR. LINDGREN: So the motion is no longer
8 made returnable on a date to be fixed, that date is now
9 May 8th?

10 THE CHAIRMAN: That's right. We are now
11 suggesting going through this scenario that the return
12 date be May 8th with the factum of fact and law being
13 submitted as we indicated by Mr. Castrilli by April
14 13th and the responses by the other parties to be
15 submitted by April 27th, with a further response by the
16 Ministry to be distributed by May 4th.

17 MS. MURPHY: And that response would be
18 in the form of factum and would deal with the issues of
19 law. I think Ms. Seaborn's point is well taken, that
20 we really are dealing with not only that one legal
21 issue which we have to deal with, but the scoping is
22 there to deal with all of the other evidentiary matters
23 that we are interested in in those two panels and we
24 mustn't lose sight of that.

25 THE CHAIRMAN: That's right, and the

1 statements of issues to be filed by the parties will
2 deal with everything--

3 MS. MURPHY: With those.

4 THE CHAIRMAN: --and the date for
5 submission of that, if I remember correctly, is April
6 24th -- sorry 27th.

7 MR. CASSIDY: 27th, right.

8 MR. LINDGREN: Again, just one further
9 point of clarification. If we are required or will be
10 required to serve our factum on or about the 13th of
11 April but our statement of issues itself will not be
12 due until the 27th?

13 THE CHAIRMAN: That's correct. And we
14 are asking that you send out the Notice of Motion
15 immediately by ordinary mail with a covering letter to
16 all parties indicating that the factum will be served
17 on or about April 13th. We are further directing that
18 the factum be sent out by the courier so that the
19 parties have it as quickly as possible and can then
20 work from it in formulating their responses.

21 MR. CASSIDY: If possible could it also
22 be sent by -- or not also, but in the alternative if
23 they have fax facilities we would be delighted to
24 receive it by fax.

25 THE CHAIRMAN: Yes. That goes without

1 saying. If you want to serve any of these documents on
2 parties who have fax facilities, you can certainly do
3 so. The idea being that they get it as quickly as
4 possible and not have to rely on the mail.

5 MS. MURPHY: I have one other question
6 and I don't really have a submission on it, I just
7 thought I would raise it and see if the Board or any of
8 the other parties have any thoughts on it.

9 I wondered if this particular matter,
10 particularly the issue of law, is one in which the
11 service should be on all parties and not perhaps just
12 on parties receiving full-time correspondence.

13 MS. SEABORN: Well, the motion then
14 presumably would have to go to all parties. I think
15 receiving -- the part-time parties receiving a factum
16 in the mail might be a bit confused by such a document.

17 MS. MURPHY: That's true, it does have
18 repercussions. I thought it would be wise to raise it
19 and see if people have any concerns about whether there
20 are people being left out on this particular matter who
21 should be informed.

22 THE CHAIRMAN: Well, we understand your
23 submission, Ms. Murphy, but the practice has been with
24 respect to parties who are not participating on a
25 full-time basis that certain documentation will not be

1 received by them.

2 The alternative suggestion I think would
3 be for perhaps the Board to send out a short notice and
4 put something on its 1-800 information number to the
5 effect that this issue will be argued by way of motion,
6 giving the dates et cetera, and that any particular
7 party who desires to participate in that discussion can
8 contact the Board for the material and the Board would
9 then further direct the appropriate parties to provide
10 that documentation, rather than placing the obligation
11 to send it to everybody.

12 I am not sure that we want to set a
13 precedent at this stage of sending out documentation of
14 this nature to all parties where in the past they
15 haven't been receiving certain documentation in
16 accordance with the Board's earlier rulings.

17 MS. MURPHY: That is fine. I think it is
18 fair to assume that most of the people who are
19 interested in receiving information have advised and a
20 lengthy list already.

21 THE CHAIRMAN: And we mustn't forget the
22 fact that the transcripts of the proceedings are at 35
23 transcript drops around the province and there is also
24 the Board's information number and we have Mr. Mander
25 available to advise parties if they want to call up to

1 question what is occurring in terms of these matters.

2 There is some obligation, I think, on the
3 public to follow along these proceedings without
4 receiving documentation out of the blue in the mail.

5 MS. MURPHY: Thank you.

6 THE CHAIRMAN: Okay. Are there any other
7 procedural matters at this moment?

8 Mr. Tuer?

9 MR. TUER: Could you advise us, Mr.
10 Chairman, what your plans are for tomorrow as far as
11 sitting hours are concerned?

12 THE CHAIRMAN: Well, as far as tomorrow
13 we will be breaking I think at the normal time so that
14 we are on the 5:10 plane out of here.

15 The Environmental Assessment Board is
16 holding a joint seminar with the Ontario Municipal
17 board at our offices on Friday so that we have to be
18 back Thursday night.

19 MR. TUER: So we will be breaking some
20 time after noon tomorrow?

21 THE CHAIRMAN: Some time around one or
22 1:30, in the usual course.

23 MR. TUER: Thank you.

24 MR. FREIDIN: And it's an 8:30 start
25 tomorrow?

1 THE CHAIRMAN: Yes, we will start earlier
2 tomorrow.

3 All right. If there is nothing further,
4 I think we can get on to the business at hand which is
5 to hear some evidence.

6 Dr. Euler, it is now up to you.

7 DR. EULER: Thank you.

8 MR. FREIDIN: And I think Ms. Blastorah
9 has a few procedural matters to deal with in relation
10 to Dr. Euler's evidence.

11 MS. BLASTORAH: Mr. Chairman, I would
12 just like to address the issue of the photographs to be
13 referred to by Dr. Euler because there are some new
14 ones and some that are already contained in the witness
15 statement. So I will do my best to explain this in a
16 coherent fashion.

17 Most of the photographs or the slides
18 that Dr. Euler will be using are contained in the
19 material and are numbered in -- as part of his document
20 and he will be indicating as he goes along through the
21 slides the photograph number of those photographs to
22 Document No. 4 in Exhibit 416B which is the second
23 volume of the witness statement and those photographs
24 are contained at pages 558 to 565 of Volume II.

25 THE CHAIRMAN: Sorry, what were those

1 pages again?

2 MS. BLASTORAH: 558 to 565.

3 THE CHAIRMAN: Okay.

4 MS. BLASTORAH: Okay. I do have hard
5 copies of the photographs contained in the witness
6 statement that Dr. Euler will be using and I would like
7 to file those now. (handed)

8 THE CHAIRMAN: Do these hard copies
9 comprise all of the reproductions in Exhibit 416B?

10 MS. BLASTORAH: No, I believe only those
11 ones that Dr. Euler will be using in his presentation.
12 Is that correct?

13 DR. EULER: Pardon me?

14 MS. BLASTORAH: The photographs that we
15 have hard copies of I believe are only those that you
16 will be using in your presentation, not all of the
17 ones contained in the witness statement?

18 DR. EULER: That's correct.

19 THE CHAIRMAN: So as far as exhibiting
20 these, we should give these the same numbers as
21 appear --

22 MS. BLASTORAH: Well, perhaps we could
23 just mark the entire package as one exhibit number.

24 THE CHAIRMAN: All right.

25 MS. BLASTORAH: They are in fact

1 contained in the witness statement. They are really
2 just for the Board's reference because the quality of
3 reproduction in the witness statement is not always the
4 best. The practice in the past has just been to give
5 the package one exhibit number.

6 THE CHAIRMAN: All right. That will be
7 Exhibit No. 471.

8 ---EXHIBIT NO. 471: Package of hard copy of
9 photographs to be used in Dr.
10 Euler's presentation. (Exhibit
416B)

11 THE CHAIRMAN: I will refer to it hard
12 copies of photographs to be used by Dr. Euler in his
13 presentation, all of which are contained as well in
14 Exhibit 416B.

15 MS. BLASTORAH: Correct. Now, in
16 addition to the photographs already contained in the
17 witness statement, Dr. Euler will be showing some new
18 slides and we will be preparing hard copies of those to
19 both the Board and the parties.

20 Unfortunately we don't have those
21 available at this time, hopefully we will have them by
22 tomorrow.

23 I think since we have them on the screen
24 it won't be necessary to have them here today and Dr.
25 Euler will indicate as he goes through his evidence

1 which of the photographs are the new ones that are not
2 contained in the material already provided. In
3 addition --

4 THE CHAIRMAN: How are we going to deal
5 with those in terms of the evidence coming in?

6 MS. BLASTORAH: Well, perhaps what we
7 could do is assign them numbers as we refer to them and
8 we will hand them out when --

9 THE CHAIRMAN: Individually.

10 MS. BLASTORAH: Individually I think
11 because they are scattered throughout the presentation.

12 THE CHAIRMAN: Very well.

13 MS. BLASTORAH: And I will make an
14 attempt when I provide the photocopies of those slides
15 to the parties I will try and mark on them the exhibit
16 numbers that have been assigned.

17 THE CHAIRMAN: Very good.

18 MS. BLASTORAH: In addition to actual
19 photographs -- slides of photographs, there are also
20 some slides that are essentially graphs, diagrams and
21 bullet charts.

22 We do have hard copies of those now and I
23 will hand those out to the parties so they can mark the
24 exhibit numbers on them as we go. And where a few of
25 the slides that we will be seeing this morning were

1 contained in earlier evidence and are already contained
2 in the witness statement, again Dr. Euler will indicate
3 as he goes where those are contained in the material
4 already in the parties' hands.

5 THE CHAIRMAN: And will the parties --
6 have they been apprised of those other documents which
7 contain those other photographs?

8 MS. BLASTORAH: They are all in the
9 witness statement and I assume that they would have
10 their witness statements here, so we didn't advise them
11 to bring anything else and we will be giving the page
12 and photograph numbers in those few cases.

13 THE CHAIRMAN: Very well.

14 MS. BLASTORAH: And one final matter.
15 Dr. Euler will also be referring to the two large maps
16 shown up here. We unfortunately don't have copies of
17 those maps to give out to everyone but we do have a
18 number of copies of Exhibit 363 which is a small
19 booklet entitled Hunting Regulations Summary Fall
20 '88-Spring '89 and it does contain a number of maps
21 which are very similar to the large maps on display and
22 which will be useful to the parties in terms of Dr.
23 Euler's reference to those large maps.

24 So I will hand those out and Dr. Euler
25 will indicate at the appropriate time which page in

1 this document the parties can refer to.

2 THE CHAIRMAN: And that is already an
3 exhibit?

4 MS. BLASTORAH: It is already an exhibit
5 No. 363.

6 THE CHAIRMAN: Very well.

7 MS. BLASTORAH: Perhaps we could just
8 mark the package of overheads with one exhibit number
9 rather than mark them individually since we have them
10 all stapled together.

11 THE CHAIRMAN: Exhibit 472.

12 ---EXHIBIT NO. 472: Package of hard copies of
13 overheads.

14 MS. BLASTORAH: Thank you, Mr. Chairman.
15 I will just pass these copies out to the parties.

16 Mr. Chairman, it has been pointed out to
17 me that it would probably be wise to just number the
18 pages of Exhibit 472 so that when we get to the
19 individual graphs and charts it will be easier to
20 reference them. So perhaps the parties could just do
21 that when I hand them the copies, if they number the
22 pages 1 to whatever.

23 THE CHAIRMAN: I seem to end up with 11;
24 is that right?

25 MR. FREIDIN: What page did you start on?

1 THE CHAIRMAN: I started on the first
2 page.

3 MS. BLASTORAH: I haven't numbered mine,
4 Mr. Chairman. I come up with 11 as well.

5 THE CHAIRMAN: My colleague, Mr. Freidin,
6 has brought to my attention one further matter that
7 perhaps the Board should very quickly address and then
8 we promise Mr. Euler -- or Dr. Euler we will get to
9 you.

10 The Board has received a letter from the
11 Ontario Federation of Anglers & Hunters. The letter
12 appears to be -- or sorry, the letter is dated March
13 20th, 1989, it is addressed to Mr. Mander and it
14 requested directions from the Board with respect to the
15 Federation not being represented by counsel for
16 possibly the next few weeks and a request that Mr.
17 Hanna be permitted to not act as counsel but conduct
18 the questioning of the witnesses until such time as the
19 Federation were in a position to retain counsel once
20 again.

21 And the letter indicates that part of the
22 problem stems from a lack of financial resources for
23 that organization and they are hopeful that if further
24 intervenor funding is available they will be in a
25 better position to retain full-time counsel to

1 participate in the rest of the case.

2 The Board, of course, has no restrictions
3 whatsoever on parties appearing unrepresented by
4 counsel and, accordingly, there would be no problem
5 with Mr. Hanna conducting the questioning on behalf of
6 that organization in any event.

7 What it does however impinge upon are the
8 Board's rules in terms of order of presentation and
9 normally unrepresented counsel would follow, for
10 instance in this particular proceeding, the Ministry of
11 the Environment.

12 The Board, however, would like to retain
13 the present order with the Ministry of the Environment
14 examining last in order, and because Mr. Hanna has been
15 present for a good part of the proceedings to date and
16 the Federation has been in attendance, more or less on
17 a regular basis, it is the Board's view that Mr. Hanna
18 should be permitted to conduct the examinations in the
19 same order that the Federation has been allotted in the
20 overall scheme to date.

21 I do not know if this should necessarily
22 be the subject of further discussion by any of the
23 parties but, nevertheless, the Board felt that it
24 should bring it to the attention of everybody and place
25 it on the record.

1 MS. SEABORN: We would certainly, Mr.
2 Chairman, agree with the Board's view on this matter.

3 MR. FREIDIN: And I have no problems with
4 the suggestion. I think if Mr. Hanna wants to go in a
5 different order, that's up to Mr. Hanna to request, and
6 I assume that he, as a representative or as the agent
7 for the Federation of Anglers & Hunters will be subject
8 to the usual procedural rules and controls by the
9 Board.

10 THE CHAIRMAN: That is correct. Thank
11 you.

12 Very well, Mr. Freidin, we are ready.

13 MR. FREIDIN: Good morning, Dr. Euler.

14 DR. EULER: Good morning.

15 DAVID LOWELL EULER,
16 PETER PHILLIP HYNARD,
17 JOHN TRUMAN ALLIN,
18 RICHARD BRUCE GREENWOOD,
CAMERON D. CLARK,
GORDON C. OLDFORD, Resumed

19 CONTINUED DIRECT EXAMINATION BY MR. FREIDIN:

20 Q. Dr. Euler, could you please advise
21 the Board what the main messages of your evidence are
22 going to be?

23 DR. EULER: A. Yes, I would be pleased
24 to if I could have the lights and I'll get that
25 projector turned on. We will start by using the visual

1 aids that we have prepared.

2 There are really three main messages that
3 I would like to present in my evidence here, Mr.
4 Chairman, and those are in order.

5 The first important point that we would
6 like to make is that - and this is page 1 of the
7 handout that we have labeled Exhibit 472 - I would like
8 to point out that first of all wildlife habitat
9 objectives are achieved in the timber management
10 planning process and that's really the only way that we
11 can achieve our habitat objectives simply because of
12 the vastness of the forest, the expense of trying to
13 manipulate wildlife on its own, prohibit wildlife
14 management activities that involves extensive
15 manipulation of vegetation. It is just too expensive
16 and the forest is too big. So we are involved in
17 working with the timber management process to achieve
18 our habitat objectives.

19 The second point is I would like to have
20 as a major theme judge us by our objectives; how are we
21 doing, are we achieving what we set out to achieve or
22 are we not. I think it is far more important to judge
23 us by what we achieve than by some particular tool that
24 we might use in achieving that objective.

25 Q. When you refer to a tool you might

1 use in achieving your objectives, what type of tools
2 are you referring to?

3 A. Well, a habitat management guideline
4 for example. The Moose Habitat Management Guidelines
5 are an example of a tool that is used to reach an
6 objective and the tool is extremely important and we
7 spend a lot of time developing our tools, but
8 ultimately what counts is are we achieving the
9 objective, how are the moose doing is really what we
10 are here for.

11 And the third item that we have to think
12 about is habitat is extremely important, there is just
13 no question about it, but it is not everything and wild
14 animals are affected by weather conditions, by disease,
15 by predators, by human activities and those other
16 activities can also affect animals very, very
17 substantially. So it is important to not lose sight of
18 the fact that habitat extremely important but it isn't
19 everything.

20 So, Mr. Chairman, those would be the
21 three main messages that I would like to convey over
22 the course of my presentation.

23 Q. Now, during the evidence, Dr. Euler,
24 we have heard about natural disturbance in the boreal
25 forest several witnesses. Can you describe how wild

1 animals have adapted to this disturbance forest?

2 A. Yes, and just in doing that I would
3 like to just remind the Board and everyone about the
4 nature of the boreal forest and this disturbance forest
5 and is a mosaic of pattern, a mosaic of different kinds
6 of plant community and it is a result of a number of
7 forces that disturb it over time: Fire, insect, wind
8 storms and so on, and the Board has heard a great deal
9 about that.

10 Well, the wildlife that live there have
11 had to adapt to these periodic disturbances and to the
12 plant communities that result from the disturbances,
13 and so they live here and they have learned over time
14 how to cope with these massive and major disturbing
15 factors.

16 So in this slide which is also slide No.
17 1 of the witness evidence statement, I just want to
18 remind you of the mosaic and pattern that's up there.

19 In a way wildlife can be grouped into two
20 categories. The first category is that of a generalist
21 and by that I mean an animal such as a moose that has
22 adapted to a variety of plant communities and in a way
23 sort of lives in the forest as a generalist; it uses a
24 wide variety of plant communities, a wide variety of
25 situations and in this picture which is No. 3 in the

1 witness statement, we just begin to point out moose as
2 an example.

3 There has been a lot of discussion about
4 moose in the hearings and I thought first of all you
5 might like to see one with the sunshine on his nose and
6 point out that this is one of the important plant
7 communities for a moose.

8 Following a disturbance, fire, whatever
9 the disturbance might be, logging, there is a regrowth
10 of the vegetation and moose find this vegetation very
11 palatable. It is an extremely important part of their
12 diet and they spend a great deal of time foraging in
13 these early successional plant communities. And you
14 can see in this one he is right up to his nose in food.
15 That's a pretty good situation for a moose.

16 Q. And we have heard evidence before and
17 we will hear evidence here about browse being created.
18 Does this picture have anything to do with browse, or
19 does it depict browse?

20 A. Yes, in a way it does although I have
21 got a little better picture of browse, but in the early
22 successional plant communities, what the moose is
23 eating here primarily are the leaves of these trees and
24 they generally strip the leaves off the end of the
25 trees and this is summer and early -- spring and summer

1 food.

2 Now, as a generalist the moose then need
3 other kind of plant communities as well. So another
4 important plant community for moose are aquatic feeding
5 areas. In this case, there are a number of plants
6 growing along the edge of this area and the moose go in
7 there in the early spring, they move right into the
8 water and they feed under water.

9 The plants that are in the water have
10 important elements that they need especially after a
11 winter of living on relatively small amounts of food.
12 So in this slide which is No. 6 in the witness
13 statement, I just wanted to give you a sense of what an
14 aquatic feeding area for moose would be.

15 Q. Could you point out with the pointer,
16 if it works, where the aquatic feeding areas are in
17 that picture?

18 A. Yes. The aquatic feeding areas would
19 be along the edges. You can see some of the aquatic
20 plants in this area right here along the edge. There
21 are some along here as well and in this particular case
22 the nice thing about it is there is a good travel,
23 there is good cover so the moose can find its way down
24 to the aquatic feeding area and be hidden from view of
25 predators or whatever concerns it might have and then

1 can feed and then retreat again.

2 Q. And I understand that that is
3 photograph No. 6?

4 A. Yes, that's photograph 6 from the
5 witness statement.

6 Now, in the early winter moose move into
7 areas upland, hardwood areas and in this picture you
8 see the browse that Mr. Freidin was referring to.

9 When we use the word browse, we mean the
10 terminal portion of twigs; that is the last two to
11 three inches of twigs of bushes and trees and in the
12 wintertime after the leaves have gone, the moose has to
13 subsist on browse. Browse is not a very nutritious
14 source of food and moose have evolved so use it because
15 they are ruminants and because of the fact that they
16 can ruminate on this material and get the good that's
17 out of it.

18 And in this slide which is No. 4 from the
19 witness statement, you see a moose in early winter
20 habitat. You notice the snow is not terribly deep and
21 the browse in the form of these plants are nearby,
22 easily available to the moose, he just has to lower his
23 head and he can reach them.

24 So this I think is the third type of
25 plant community that moose use. And remember we

1 pointed out that a moose is a generalist in this boreal
2 forest and has evolved then to take advantage of the
3 variety of plant communities that are available from
4 the various disturbance factors that are in this
5 forest.

6 And in the last slide that I have of
7 moose, which is No. 5 in the witness statement, I
8 wanted to point out where they go in late winter. So
9 in late winter when the snow is deep and is high enough
10 to reach perhaps to his shoulder or the bottom of the
11 belly, the moose must find some mature conifer and they
12 escape into this mature conifer in the wintertime to
13 seek shelter from snow and predators.

14 They also during some portions of the
15 summer when they have to escape the heat of summer will
16 utilize portions of this mature conifer areas. So for
17 a moose to survive in the boreal forest it has learned
18 to use all these various plant communities and it needs
19 a combination of these plant communities in order to do
20 well.

21 Plant communities that the moose needs
22 that are in close proximity make the very best moose
23 habitat, and so we call a moose a generalist then just
24 because of this variety of plant communities and the
25 way it has evolved to live in the boreal forest.

1 Q. And can you advise: You say that the
2 moose is a generalist and, therefore, uses all of these
3 vegetative communities. If you are providing through
4 your management of moose, a generalist, these
5 vegetative communities is that a benefit to other
6 animals?

7 A. Well, it often is and we are going to
8 spend a fair bit of time talking about that. It does
9 benefit other species.

10 Now, we can talk about another kind of
11 species that exhibits a different characteristic in the
12 boreal forest. We usually refer to this as a
13 generalist -- or, I am sorry a specialist. Now, as
14 opposed to moose that have evolved to use a wide
15 variety of plant communities, specialists tend to be
16 very specific in the kind of plant community that they
17 require.

18 And in this slide, which is No. 10 from
19 the witness statement, is a picture of a hawk owl. It
20 is something that people don't see very often, it is a
21 bird of the boreal forest relatively rare in Ontario
22 and partly rare because it is a specialist and there
23 aren't that many niches for it to live in.

24 And this animal, as opposed to the moose
25 as a generalist, has specialized in a certain kind of

1 plant community. And, in this case, hawk owls has
2 specialized to the mature plant communities. They nest
3 in the top of a tree that has broken off. So a tree,
4 for example, that has been weakened by disease may have
5 broken off at the top, the top then will form a
6 cup-shaped depression and they nest in the top or they
7 may nest in a cavity in a tree and then they hunt in
8 these mature areas and particularly looking for small
9 mice and some small birds that are living in mature
10 forest areas.

11 So that is the second sort of general
12 category, wildlife specialist.

13 Now, in the boreal forest there are a
14 number of generalists and a number of specialists and
15 this is how they have evolved to cope with the
16 disturbance forest.

17 Q. I think in your evidence you
18 indicated I believe the hawk owl, as a specialist,
19 might favour or fit into certain niches. And what did
20 you mean by that?

21 A. Well, in the jargon of plant ecology
22 we talk about an animal's niche as the place that it
23 occupies in the natural world, so it is sort of its
24 home, its house.

25 So as an analogy the hawk owl lives in a

1 house that we would describe as mature forest and in
2 this slide which is No. 11 in the witness statement, I
3 have tried to show an example of the house or niche of
4 hawk owls.

5 Q. Okay. Now, from a wildlife point of
6 view, Dr. Euler, is the Great Lakes/St. Lawrence Forest
7 different from the boreal forest?

8 A. Well, yes, it is and you will
9 remember in this slide that Peter Hynard showed, which
10 is No. 1, Exhibit 416A, the aerial view of the Great
11 Lakes/St. Lawrence Forest and the Great Lakes/St.
12 Lawrence Forest differs from the boreal forest in that
13 it has not been as disturbed as the boreal.

14 So the incident of fire has been less and
15 the forces that have shaped this forest have not been
16 nearly as catastrophic in their effects on the plant
17 communities and so there tends to be a more stable
18 forest community in the Great Lakes/St. Lawrence
19 Forest.

20 Now, as with everything in biology there
21 are exceptions and fires do occur here and insects do
22 cause damage to these forests and occasionally wind
23 storms blow them down, but as a general rule there is
24 less disturbance than in the boreal.

25 MR. FREIDIN: And, Mr. Chairman, that

1 photograph is photograph 3.6 in Document 1 of 416A.

2 DR. EULER: Now, however we can still use
3 the same concept of generalist and specialist in this
4 forest because the concept of generalist and specialist
5 is very pervasive throughout much of the natural world
6 and the analogue in the Great Lakes/St. Lawrence Forest
7 to the moose is a white-tailed deer. It too is a
8 generalist and has evolved to exploit the various kinds
9 of plant communities that occur in this forest.

10 Now, in this picture, which is No. 7 in
11 the witness statement, this is a white-tailed deer
12 grazing in the early spring in an opening in the forest
13 and they need this plant community because after
14 spending a long winter of very little food - and the
15 food that they do have, which is browse, is not high in
16 nutrition - they come out of winter in a very depleted
17 state; they are thin, they have lost all their fat
18 reserves, their nutrient supplies are down and they
19 need to get on to this fresh, green, protein-rich
20 nutrient-rich vegetation.

21 So when the snow is gone they search for
22 openings and graze in them extensively to replace the
23 fat reserves and nutrients that they have lost in the
24 winter.

25 As the year moves on, they begin to

1 forage a little bit more in the lush secondary growth
2 that follows disturbance. So in this slide, which is
3 No. 8 from the witness statement, just illustrate how
4 the animal then begins to change its food habits a bit
5 as the year moves on. And you remember the picture of
6 the moose up to his nose in food; well, this is a deer
7 in a similar kind of situation.

8 Q. Before we go on to the next
9 photograph, in the first picture of the deer where you
10 showed it grazing in an opening, can you advise whether
11 some of the openings that they do rely on are openings
12 created through timber management?

13 A. Yes. This is a typical opening that
14 could easily be created in timber management. Often
15 after a timber harvest has finished in a log landing,
16 often a log landing is seeded with grass and clover and
17 in subsequent years the log landing then could look
18 just like this and could be a very useful source of
19 food for deer as well as other creatures in the
20 forest -- of the Great Lakes/St. Lawrence Forest.

21 Ruffed grouse use these openings, black
22 bear use these openings, a number of other creatures
23 use these openings.

24 Now, in the last slide I have of a deer,
25 which is No. 9 from the witness statement, I just

1 wanted to point out that deer require mature conifer
2 vegetation to get through the winter in an analogous
3 way as to moose. So once the winter snows hit, in
4 order for the deer to make it through the winter, they
5 have to go and spend virtually all their time in areas
6 of mature conifer shelter.

7 Under the mature conifer the snow is less
8 deep and the temperature is slightly higher and by
9 aggregating under these conifers in groups or herds -
10 and sometimes you will hear the term deer yard, and
11 what that refers to is just these areas where deer
12 congregate in the wintertime - they also achieve some
13 protection against predators; there is safety in
14 numbers.

15 So they too require a series of plant
16 communities from open, to lush second growth, to mature
17 conifer and we classify them also as a generalist.

18 Now then, in the Great Lakes/St. Lawrence
19 Forest there are also specialists and the one that I
20 chose to show you here is an ovenbird, it's a small
21 bird that lives on the forest floor. This is slide No.
22 12 from the witness statement and illustrates the kind
23 of creature that lives in that forest and has adapted
24 to a very specific niche.

25 In this case it's a ground Wellingbird,

1 builds its nest in the form of a mound on the ground
2 with an opening in it and when the early settlers came
3 here they noticed these nests and they looked like the
4 ovens that they used to bake bread, the earthen ovens,
5 and so they called it the Ovenbird. And it has
6 specialized to the mature deciduous forest in the Great
7 Lakes/Saint Lawrence area.

8 So it needs areas with fairly mature
9 deciduous trees and in this slide, which is No. 13 from
10 the witness statement, I just want to illustrate the
11 kind of habitat that this specialist requires.

12 Another specialist in this forest is the
13 Black-throated Green Warbler. Often these small birds,
14 which you see here in picture No. 14 from the witness
15 statement, are in the tops of trees and they are not
16 readily visible to the casual visitor to the forest.

17 They are, however, extremely important in
18 terms of their ecology, in terms of the fact that they
19 are an important part of the web of life in that forest
20 and we are very concerned that the process of managing
21 the forest provide habitat for all of these creatures.

22 This particular specialist lives in
23 mature conifer and in this slide, which is No. 15 from
24 the witness statement, I just wanted to show an
25 illustration of the mature conifer that that bird

1 requires.

2 These warblers in general divide these
3 trees up and one certain species, the Black-throated
4 Green is one, feeds near the top of the tree. Other
5 warblers have specialized to the middle of the tree and
6 still others the lower part of the tree. And within
7 those groups some are specialized in feeding on the
8 inner branches and some on the outer branches.

9 In this particular case then what you are
10 looking at is some excellent Black-throated Green
11 Warbler habitat in the Great Lakes/St. Lawrence Forest
12 and just to sum up the concept then in to forests, the
13 boreal forest being more a disturbance forest, two
14 kinds of wildlife, the generalist which exploit the
15 variety of plant communities that are there and the
16 specialist that exploits particular niches.

17 There are a total of 309 vertebrates that
18 breed in this forest and our responsibility is to try
19 to manage habitat to provide for all of their needs.

20 Q. Dr. Euler, you referred --

21 THE CHAIRMAN: Mr. Freidin, before he
22 goes on, this might be an appropriate time for a break.

23 MR. FREIDIN: Okay.

24 THE CHAIRMAN: So I think we will take 20
25 minutes this morning.

1 Thank you.

2 ---Recess taken at 11:05 a.m.

3 ---Upon resuming at 11:30 a.m.

4 THE CHAIRMAN: Thank you. Be seated,
5 please.

6 Mr. Freidin, we will proceed until 12:30
7 and then break for lunch at that time.

8 MR. FREIDIN: Okay.

9 THE CHAIRMAN: If it's convenient.

10 MR. FREIDIN: Perhaps Mr. Martel could
11 bring some miners caps back from Sudbury next week.

12 MR. MARTEL: I can bring some.

13 MR. FREIDIN: Thank you.

14 MR. MARTEL: Do you want the lights?

15 MR. FREIDIN: That's what I want,
16 exactly.

17 Q. Now, Dr. Euler, just three questions
18 that arise from the slides that you have shown of the
19 boreal and the Great Lakes/St. Lawrence and the
20 generalists and specialists therein.

21 Firstly you referred to mature forest and
22 you were speaking of both the boreal and Great
23 Lakes/St. Lawrence. What do you mean by that?

24 DR. EULER: A. Generally we mean by
25 that, much what the forester means in that it is a

1 forest that the trees are mature. If they are
2 harvested at that point it makes the most economical
3 return to the harvester but, in addition, we are
4 concerned about the structural complexity of that
5 forest. So in our terms a mature forest also has quite
6 a bit of complexity, there tends to be more debris on
7 the ground, there are more different kinds of trees in
8 that forest in different stages of development.

9 So we see a structurally complex forest
10 that the trees of which are near the end of their life
11 cycle and they have just finished the period time when
12 they are putting wood on the stem.

13 Q. And when you were discussing the
14 moose eating the browse in the winter you said it
15 wasn't the greatest stuff but they could ruminate.
16 What was that all about?

17 A. Ruminant refers to that group of
18 animals that have four stomachs and normally they take
19 food and chew it up a bit, put it into the first
20 stomach, bring it back up and ruminate again, put it
21 back down and so on. I don't think I have to go on too
22 much further.

23 Q. I am not too sure it is relevant, but
24 I just thought it was interesting.

25 THE CHAIRMAN: Well, that is how the

1 Board considers the evidence.

2 DR. EULER: You ruminate on it. Well, I
3 am glad because that means you will get all the good
4 out of it.

5 The serious point is that browse that
6 those animals eat is not very nutritious and the only
7 way they can get the nutrition out of it that they need
8 is to process it extensively. Now, of course our
9 evidence is better than that and you don't have to
10 ruminate as much as an ungulate would have to.

11 MR. FREIDIN: Q. Can you just go back or
12 show slide No. 1 again.

13 DR. EULER: A. certainly. We will see
14 them backwards here. The Black-throated Green and the
15 and Ovenbird, the deer in lush vegetation and in
16 opening of the Great Lakes/St. Lawrence and that is
17 that that hawk owl looking quizzically down from a tree
18 and back through the moose and the aquatic feeding area
19 and -- sorry, the boreal forest, this is slide No. 1
20 from the evidence package.

21 Q. Now, you indicated that that
22 photograph demonstrated or depicted a mosaic. And what
23 did you mean by mosaic and can you show -- by reference
24 to the photograph, can you explain mosaic by reference
25 to the photograph, sorry?

1 A. Yes. When we talk about mosaic in
2 this forest, we mean the sum total of all the things
3 that are there, the different plant communities, the
4 different ages of those plant communities, the water
5 areas, the rock areas, the low soil areas, it is a
6 combination of a wide variety of plant communities and
7 structural features and animals then find niches or
8 houses within it.

9 So, you see, here is an example of trees
10 that have been killed by a fire and there are other
11 examples here of conifer that haven't been killed by a
12 fire that are in a stage of nearing -- at or near their
13 mature stage, and this looks like a wetland of some
14 kind. And if you look at this -- there is a lake in
15 the background. If you look at it, if you fly over it
16 with the wings of an eagle, you see a vast array of
17 different kinds of plant communities and structural
18 features.

19 Now, I am going to have to flash through
20 these slides again to get back to where we were so you
21 will see the moose and the deer and the Ovenbird and
22 the Black-throated Green Warbler and so on.

23 THE CHAIRMAN: Perhaps we should give
24 them names as we go along.

25 DR. EULER: Would you like to do that.

1 All right. Perhaps you could have the privilege of
2 naming this one right here. Okay.

3 MR. FREIDIN: Q. Dr. Euler, if you were
4 in the process of evaluating changes to the forest
5 which were brought about by logging or any other form
6 of disturbance, what are the important variables that
7 you would consider in that evaluation?

8 DR. EULER: A. Well, in looking at it
9 and trying to make the best judgment that I could I
10 think the first thing we look at is the amount of slash
11 that was left after the disturbance.

12 In this case, logging has left a lot of
13 slash on the ground, in this particular example, and
14 that slash is home to a number of small creatures both
15 vertebrate and invertebrate and when I use the term
16 vertebrate, I mean animals with a backbone, the common
17 animals that we would generally call wildlife are
18 almost synonymous with vertebrate. So mice, deer, birds
19 are all vertebrates. Invertebrates are primarily
20 insects and other small creatures.

21 Now, both vertebrates and invertebrates
22 would live in that slash and would provide then -- that
23 would provide habitat for those small creatures which
24 are in turn food for other creatures.

25 So leaving slash there has certain

1 advantages and certain disadvantages and in evaluating
2 the impact of the cut, this is a variable that I think
3 is very important and you would say: Well, if there is
4 slash there it is probably good for the Southern
5 Red-backed Voles that live there - a tiny little
6 mouse-like creature - it is probably not quite as good
7 for the bigger ungulates because it may impede their
8 travel through the area.

9 So you have to evaluate the pluses and
10 the minuses of everything. So in this case where there
11 is lots of slash you would make some decisions about
12 whether it was good or bad and likewise, following a
13 disturbance, if very little slash has been left on the
14 site, that has certain implications for the wildlife
15 present.

16 In this case this is not good habitat for
17 Southern Red-backed Voles because there is virtually no
18 cover there. On the other hand, it may be better
19 habitat for some other creature that lives in the soil
20 and needs that kind of environment.

21 So the first variable is slash, how much
22 is there, and what are the impact on wildlife.

23 Q. And I understand that the photographs
24 in relation to slash were 16 and 17?

25 A. That's right. I am sorry, slide 16

1 from the witness statement and slide 17 from the
2 witness statement.

3 Now, this is slide 18 from the witness
4 statement and illustrates the second variable to
5 consider which is the amount of cover that has been
6 left following the disturbance.

7 As you can see here there isn't very much
8 cover left for wildlife, as opposed to this slide which
9 is slide 19 from the witness statement where following
10 this particular cutting operation there will be a fair
11 bit of cover in the form of vegetation left on the
12 site.

13 So the second variable then to be
14 concerned with is cover left after the site.

15 Q. That particular photograph,
16 photograph 19, is in the...

17 A. It is in the witness statement.

18 Q. In the Great Lakes/St. Lawrence
19 Forest?

20 A. Yes, that is, that is in the Great
21 Lakes/St. Lawrence Forest.

22 Q. And are you aware of the harvest
23 method that been used there in terms of -- it's a
24 silvicultural system that has been used there?

25 A. Yes, this would be harvested under

1 the selection silvicultural system and just illustrates
2 the variety of cover that can be left depending on the
3 technology that is employed.

4 In slide 21, the next variable after
5 slash and cover remaining, concerns how much deciduous
6 cover is left or will be on the site following a
7 harvest operation and how much is deciduous - sorry, I
8 guess I didn't say that right - this is, of course, the
9 conifer cover left in slide 21; or how much deciduous
10 cover is left.

11 In this case, for example, if you were
12 evaluating the impact of this cut on wildlife, the
13 first thing that comes to mind is there is abundant
14 moose food there. If you are looking at slide 21 from
15 the witness statement, your first thought might be:
16 Well, potentially this will be moose cover later on and
17 immediately it would be good habitat for a smaller
18 creature such as a Field Sparrow or a Grasshopper
19 Sparrow.

20 This slide is a new slide. This is one
21 that we will provide you with a copy later.

22 MR. FREIDIN: Are we going to give those
23 separate exhibit numbers I believe, Mr. Chairman, so...

24 THE CHAIRMAN: Okay. That exhibit for
25 that slide will be Exhibit 473.

1 ---EXHIBIT NO. 473: Copy of slide No. 21 (witness
2 statement for Panel 10) depicting
3 relatively dense deciduous
 regeneration after a cut.

4 THE CHAIRMAN: To be produced at some
5 later date. What is the title of that slide, Dr.
6 Euler?

7 DR. EULER: This one right here?

8 THE CHAIRMAN: Yes.

9 DR. EULER: I titled that relatively
10 dense deciduous regeneration after a cut. Just
11 illustrating the variable of deciduous conifer
12 component following a cut.

13 MR. FREIDIN: Q. Now, is the proximity
14 of these different habitats or variables one to the
15 other of any significance?

16 DR. EULER: A. Yes, they are. It is a
17 very significant part of the equation and if you
18 evaluate a cut, as we are illustrating here in picture
19 No. 31 from the witness statement, it is extremely
20 important that you know what is in the vicinity of the
21 cut.

22 So by itself knowing information about
23 the cut is not very helpful. You could know the size
24 of this cut and you can know the shape of this cut, and
25 if that is all you knew, you would have very little

1 information to make a decision on.

2 So it is only when you can evaluate all
3 of those variables together can you make a good
4 decision about the impact of that disturbance on the
5 wildlife in the area.

6 Q. How does plant succession influence
7 wildlife habitat?

8 A. Plant succession, of course, is the
9 process that plant communities go through as they
10 change from a disturbed area back to a mature forest
11 and, as well as the plant succession, there is a
12 succession of animal species that occupy the stages of
13 plant succession.

14 I am going to illustrate that with an
15 overhead which is part of the handout -- or part of
16 the handout, it is also in the witness statement on
17 page 540.

18 So what we have here is just a
19 generalized process of succession and, in general, it
20 goes from the low shrubs and vegetation following a
21 disturbance through to the mature plant community and,
22 at the same time --

23 MR. FREIDIN: Mr. Chairman - just one
24 moment, Dr. Euler - I think -- it's not part of the
25 handout, Mr. Chairman, it is at page 540 of the witness

1 statement.

2 THE CHAIRMAN: Okay.

3 MR. FREIDIN: Okay. Can everybody hear
4 Dr. Euler?

5 Q. Okay.

6 DR. EULER: A. So this is a generalized
7 illustration of the successional process at the bottom,
8 the successional process of the plant community. It
9 isn't meant to show any specific location anywhere, it
10 is simply a general view and I think you already heard
11 quite a bit of evidence about how succession proceeds.

12 Well, the other thing that is happening
13 as succession proceeds is that certain wildlife species
14 are also part of this process and there is quite a
15 range. Generalists, for example, such as the
16 Short-tailed Shrew which is a little mouse-like animal
17 about as big as two or three fingers on your hand, is
18 predominant and prevalent throughout this whole
19 process. Moose, you remember, and deer are also
20 generalists that would occupy portions of this
21 successional stages.

22 Then the specialists find homes somewhere
23 within that process of succession. Here's our attempt
24 to illustrate the Black-throated Green Warbler that I
25 showed you earlier and, as you can see, it tends to

1 occupy a reasonably narrow portion of that process.
2 The natural warbler occupies a fairly small portion of
3 the successional process.

4 Q. Now, in the forest do the rates of
5 succession differ depending on where you are?

6 A. Yes, they do and it will depend on a
7 number of variables: the site conditions, the water
8 available, the nutrients available. So that the
9 successional process can be variable and it can go
10 through the process from low vegetation to mature
11 vegetation in time ranging from a hundred years to
12 several hundred years depending on the conditions.

13 Q. Can I direct you, Dr. Euler, to the
14 witness statement Exhibit 416B, in particular page 519.
15 Do you have that?

16 A. Yes.

17 Q. And at the top of the page --
18 beginning at the top of the page it states that:

19 "The Ministry is committed to maintaining
20 all species of wildlife at levels
21 necessary to sustain viable populations
22 and meet wildlife management objectives.
23 Inherent in this objective is the need to
24 Ensure that none become threatened or
25 Endangered due to human activities

1 including timber management."

2 In that particular portion of evidence, Dr. Euler, what
3 is meant by viable populations?

4 A. Okay. What is meant by viable
5 populations is the concept that the population should
6 be healthy over a fairly long period of time. There
7 may be short-term fluctuations, those are acceptable,
8 but over a period of time of perhaps a decade, the
9 average population should be reasonably constant.

10 And I will just make a quick illustration
11 on the flow chart of what I mean with a graph, if I
12 may.

13 Q. Okay.

14 A. So if you were to draw a graph and on
15 this axis you plotted the numbers of animals, the
16 numbers of animals of the particular species that you
17 are concerned about, perhaps you are studying
18 Red-backed Voles, and on this axis you were to make a
19 time progression - it could be months, probably would
20 be in years - you would find that the population
21 fluctuated something like this and in any one year it
22 might be relatively high or in another year it might be
23 relatively low, and that is all within the normal
24 natural fluctuation of animal populations in the
25 natural world.

1 But what you would look for is that these
2 populations fluctuated around a line and they did not
3 suddenly -- for reasons that you were involved in,
4 suddenly plunge down to a status that one might call
5 endangered or threatened. So the goal is to keep the
6 population at a viable level; that is, within the
7 normal fluctuations around an average.

8 THE CHAIRMAN: Do you want to mark that?

9 MR. FREIDIN: Yes, please.

10 THE CHAIRMAN: Exhibit 4784.

11 ---EXHIBIT NO. 474: Hand-drawn graph of viable
12 population.

13 THE CHAIRMAN: What would you entitled
14 that, Dr. Euler?

15 DR. EULER: Well, could we just title it
16 viable population.

17 THE CHAIRMAN: Dr. Euler, does that
18 statement on page 519 not assume that the Ministry has
19 an inventory of what wildlife exists?

20 DR. EULER: Yes, that is an important
21 assumption and I propose to address that a bit later in
22 my evidence.

23 THE CHAIRMAN: Very well.

24 MR. FREIDIN: Q. And so looking at
25 Exhibit 474, does that indicate then when you might

1 become concerned about whether in fact a particular
2 species was in danger of continuing as a viable
3 population?

4 DR. EULER: A. Well, yes. The dotted
5 line would indicate -- if you picked up measurements
6 such as the ones I have reflected in the dotted line,
7 that would indicate to the Ministry there is a
8 potential problem and we should begin applying
9 management effort to that species as quickly as
10 possible.

11 Q. Now, in the passage that I read to
12 you there was reference to wildlife objectives and
13 indicated that:

14 "The Ministry is committed to maintaining
15 all species of wildlife at levels
16 necessary to sustain viable populations
17 and to meet wildlife objectives."

18 How are those wildlife objectives expressed, Dr. Euler?

19 A. The wildlife objectives are expressed
20 in two ways, and this slide is in your handout. I
21 believe, if I have counted it correctly, it is No. 2,
22 page 2 of the handout.

23 There are two kinds of objectives in
24 wildlife management in Ontario. The first kind of
25 objective is the numerical objective where we have

1 said, for example, we would like to produce a certain
2 number of moose by a certain year. We have a number of
3 numerical objectives that are inherent in our
4 management process.

5 The second objective is this more
6 qualitative concept of viable populations and we have
7 to have that as an objective because it would be
8 impossible to count all the Black-throated Green
9 Warblers in the Province of Ontario, it is just -- and
10 impractical, there would be no need to do that.

11 And yet, at the same time, because we
12 have this responsibility, we have to take index counts
13 of them and ensure that the population remains viable
14 and so this kind of objective is not expressed in terms
15 of numbers but in terms of a concept.

16 Q. Now, when you indicate that some of
17 the objectives are numerical, and are the numerical
18 objectives expressed in different ways?

19 A. Yes, they often are expressed in
20 different ways and it depends on the kind of species
21 that we are dealing with.

22 In some species it is relatively easy to
23 inventory them. Moose, for example, we have an
24 extensive process of inventory. Other species are much
25 more difficult to inventory and we have to express the

1 numbers in different ways.

2 So for moose we would have a target or an
3 objective of numbers of animals in the population.

4 Q. And it's called a population target?

5 A. A population target, yes. Other
6 animals we might have to express the objective in terms
7 of the human use of those animals.

8 For example, we have targets for the
9 number of deer that would be available to hunters. So
10 we would specify how many deer can be taken by hunters
11 in a particular area and we might not have a population
12 target because the animals are more difficult to count.
13 And, in that case, we have to set a very conservative
14 number to ensure that we don't damage the population.

15 Other times we express targets in term of
16 recreational days.

17 Q. All right. Just before we go on to
18 that one, in relation to the hunting I understand that
19 is referred to as a harvest objective?

20 A. That is usually called a harvest
21 objective, yes.

22 Now, we also have numerical objectives
23 that don't have anything to do with hunting. For
24 example, we intend to provide viewing opportunities for
25 moose and those have been in terms of recreational

1 days. So it is a numerical target, it is perhaps just
2 a little fuzzier than a population target, but
3 nevertheless by counting and observing the number of
4 people who visit a particular area you can express a
5 numerical target in terms of viewer days.

6 That speaks to those clients who don't
7 engage in hunting, but are very interested in looking
8 at and photographing and enjoying wildlife.

9 Q. Where does one find these objectives,
10 if one wanted to know if objectives existed for any
11 particular species?

12 A. In the strategic land use documents
13 of northwestern and northeastern Ontario we have
14 expressed a number of numerical targets.

15 MR. FREIDIN: Now, Mr. Chairman, I think
16 I advised the Board and other parties that there would
17 be reference to Exhibit No. 8 which is the Northeastern
18 Ontario Strategic Land Use Plan.

19 Q. And perhaps then just by reference to
20 that document, Dr. Euler, you could point out where one
21 would find examples of the various types of objectives
22 or targets that you have described?

23 DR. EULER: A. Okay. Let's start with
24 the northeastern plan on page 35. And on page 35 is an
25 example of moose population targets. Okay.

1 So on Table 8 there in the lower part of
2 page 35 you will note the wildlife management unit
3 number - which we will talk a little bit more about in
4 a few minutes - and in column 2 you will see the
5 present total moose population for that wildlife
6 management unit, the present allowable harvest, and
7 then you will note, as you go across the column, our
8 year 2000 population target and our year 2000 harvest
9 target.

10 Q. So in the case of moose you have two
11 objectives then, a population one and a harvest one?

12 A. That's correct.

13 Q. And can you provide us an example of
14 where you have -- well, you indicated that deer were
15 similar to moose when you were looking at the Great
16 Lakes/St. Lawrence Forest in terms of in comparison to
17 the boreal, they are both generalists.

18 Do we have an objective or targets for
19 deer?

20 A. Well, if you turn to page 36 and look
21 at Table 9 there are a number of deer targets by
22 wildlife management units for the northeastern part of
23 the province.

24 Q. And again they are represented -- or
25 expressed in populations and in harvest numbers?

1 A. Yes. In this case they are expressed
2 by both population and harvest targets.

3 Sometimes it is more difficult to
4 inventory deer, and we do have some deer targets that
5 are harvest only and not population, but in this
6 example that we are looking at from northeastern
7 region, we have both population and harvest targets.

8 THE CHAIRMAN: Excuse me. Dr. Euler,
9 when you're looking at that chart on Table 8, why is
10 there a fairly large discrepancy in the number between
11 units?

12 If you take, for example, No. 1 where you
13 have the total moose population as close to 3,000 and
14 you are allowing a harvest in the year 2000 of 430
15 based on an expected population of 6,159, then you go
16 down to say 28 and you end up with 2,593, almost 2,600
17 and yet you only -- sorry, you allow more, 648 to be
18 taken in the year 2000 based on a much lesser expected
19 population.

20 How do you justify these discrepancies or
21 does it relate entirely to that particular management
22 unit?

23 DR. EULER: Yes. We have major, major
24 discussions about how to do this and there are a large
25 number of variables. Just to give you an example of

1 the kind of thing, Unit 1 is a long big unit in
2 northern Ontario with very, very little access by road
3 and so people just can't get there to take the animals
4 that are there and so it is unrealistic to say you are
5 going to take six or 700 moose when the people simply
6 can't get there.

7 So in this case the estimate was: Well,
8 we think that the potential target would be 430, we
9 could take more -- from the biological point of view we
10 could take more, but...

11 THE CHAIRMAN: I guess that's my point.
12 These numbers as to the harvest are not necessarily
13 related only to biological factors.

14 DR. EULER: Right, exactly. They are
15 related to a variety of concerns, socio-economic
16 concerns, the sheer access to the animals, it is an
17 amalgamation and a blend of a number of factors.

18 THE CHAIRMAN: Would these figures
19 include the animals taken by native communities for
20 subsistence--

21 DR. EULER: No.

22 THE CHAIRMAN: --purposes?

23 DR. EULER: No, no. The animals that are
24 allocated to the native communities come right off the
25 top. That's the first priority, as best we know it.

1 So these are the animals that are left after the native
2 harvest has been taken to our best ability. And
3 believe me, that is hard because we don't always know
4 that native harvest and it makes it extremely
5 difficult.

6 THE CHAIRMAN: Thank you.

7 MR. FREIDIN: Q. In your -- or perhaps
8 we could go on. Is there an example of a situation
9 where we have got an objective or target which is
10 related to harvest only?

11 DR. EULER: A. Yes. Let's look at page
12 37 of the same document in the left column, black bear,
13 down to the bottom of the page there.

14 You will see the target is to double the
15 present harvest of black bear by the year 2000 from the
16 current harvest level of approximately 1,550 to
17 approximately 310. So that's a harvest target and the
18 general goal is to keep the harvest down to that level
19 and our best judgment is that would not harm the bear
20 population in any way.

21 Q. Do we have one which is more general
22 in that it has neither a population or a harvest
23 target?

24 A. Well, let's look at page 38 then
25 where we will talk about small game. And when we speak

1 of small game, we think of animals like Ruffed Grouse,
2 Spruce Grouse, Snowshoe Hare, these are small game as
3 opposed to big game.

4 Big game are moose, deer, black bear and
5 caribou. So small game, the target is to meet the
6 estimated demand of 851,000 hunter days. Now, we
7 define a hunter day as one person hunting for a minimum
8 of four hours.

9 So that's not a population target or a
10 harvest target, but it is a target to meet the demand
11 of people.

12 Q. Could you advise why the targets are
13 expressed in these different ways?

14 A. Well, it all revolves around the
15 tools or techniques that we have to manage the animals.

16 Moose, for example, are reasonably easy
17 to inventory because you can fly over the land with an
18 airplane and you can count them, and you can take
19 samples and statistical pictures of the population and
20 make some calculations of them.

21 Some animals like bear, you can count
22 them after they have been harvested because you can set
23 up a check station and hunters and others who have
24 harvested a bear then can take the bear to a check
25 station, you can count it, measure it, and get ideas

1 and knowledge about the number that has been taken.

2 Other wildlife such as small game are
3 almost impossible to inventory or count and because the
4 hunting is so spread out by so many people over so many
5 different areas it is very, very difficult to count the
6 animals that they have harvested.

7 So what we have to do is try to count the
8 number of people and the number of days that they have
9 been hunting. Furthermore, there isn't as much
10 biological need to count these animals because hunting
11 plays such a small, small role in their population
12 fluctuations that there is very little need to count
13 them, as opposed to moose where hunting can play a very
14 significant role in the population changes of moose.

15 Q. Does the document that contains these
16 objectives that we have referred to have any reference
17 to the Ministry-wide objective regarding viable
18 populations that you have described?

19 A. I don't think it puts it in exactly
20 the same terms that I used, but it's certainly a theme
21 throughout all of these documents, that our first
22 objective is to the resource and to maintain the
23 resource and the implication is that the populations
24 then remain viable.

25 Q. And where do we find reference to

1 that objective?

2 A. I would say at page 34 it talks about
3 wildlife management and the general objective there
4 says:

5 "To provide the optimum social and
6 economic benefits to the residents of
7 Ontario consistent with maintenance of
8 healthy wildlife populations."

9 And that really is exactly the same thing as a viable
10 population.

11 Q. One of the major messages that you
12 stated at the beginning was to judge the Ministry by
13 the attainment of its objectives and not through, I
14 think, the tools that it has.

15 Does the evidence that we have just gone
16 through in relation to these objectives have any
17 relationship to that main message?

18 A. Yes, it does. So, for example, I
19 would say: Judge us by how the moose population is
20 doing, judge us by how the black bear population
21 harvest is coming along and how the back bear
22 population is doing, judge us by how we are meeting the
23 demand for small game hunting, judge us by our ability
24 to maintain viable populations.

25 So if we were losing a population because

1 of something we are doing wrong, we should be called on
2 the carpet for that and if we are not, then we should
3 be judged successful in our management.

4 Q. Now, is that evidence to be taken as
5 an indication that the tools are not important?

6 A. Not in the least. Our tools are
7 extremely important and we are constantly refining
8 those tools.

9 The analogy that I would like to use is
10 that of building a house. If I hire someone to build a
11 house for me I am really not going to ask him whether
12 he has a 12-ounce hammer or a 16-ounce hammer, I am
13 going to ensure those nails are in the wood and they
14 are solid and that that house is strong. And if he can
15 put them in with a 12-ounce hammer, that's fine with
16 me.

17 But I am going to judge him by the
18 quality of the work that he does and that's not to say
19 that the hammer is unimportant or that the weight is
20 unimportant, it's just I am going to let him decide
21 what is the best hammer to use.

22 Q. And when you refer to tools, are
23 guidelines such as the Moose Habitat Guidelines, do
24 they fall within that definition of tools?

25 A. Yes, they do. That's a very good

1 example of a very important tool.

2 MR. MARTEL: Can I ask a question? Maybe
3 you can answer a question. There are some fish that we
4 have had to, as I understand it, stock continuously.
5 Does that meet the objective if we continue to stock
6 and we have to continue -- and yet we continue to fish
7 and then we continue to stock to keep it there, are we
8 meeting any objectives outside of a social objective?

9 DR. EULER: Well, I'll be happy to answer
10 that from my perspective and then maybe Dr. Allin can
11 make a comment, but from my perspective and what I'm
12 trying to say, I would answer you by saying: Well,
13 what are your objectives, you see.

14 If your objective is to have a certain
15 put and take fishery, then you have met them. If your
16 objective on the other hand is to have a healthy
17 population of fish in a lake and you want those fish to
18 be made of species, you know, then that's a different
19 objective and you have to ask that question.

20 But maybe Dr. Allin would like to
21 comment.

22 DR. ALLIN: I think that answer covers it
23 pretty well. In some situations it will not be
24 possible to provide certain kinds of fishing
25 opportunities for which there is a local demand without

1 the kind of fishery that Dr. Euler has referred to, a
2 put and take fishery, wherein you don't expect the fish
3 population to reproduce naturally, you have to maintain
4 stocking and, in some cases, we do that in order to
5 meet that particular demand and need in the area.

6 MR. MARTEL: So it goes back to the
7 objective that you are establishing to determine
8 whether you are successful enough?

9 DR. ALLIN: That's right.

10 DR. EULER: Yes, you see, and this is a
11 main message: Judge us by how we attain the objective.

12 Now, the implication of course is we may
13 have a whole lot of discussion about the objectives and
14 that's excellent and healthy: How many moose do we
15 need in Ontario, for example. That's where we should
16 have a solid and careful discussion.

17 MR. FREIDIN: Q. If I could refer you to
18 one of the tools, the Moose Habitat Guidelines which
19 are marked Exhibit 310 and I would like to have you
20 turn to page 20 of that exhibit, Dr. Euler.

21 Page 20. I would direct your attention
22 to the first full paragraph on the page which begins
23 with the words:

24 "It has been observed for some time..."
25 And I wonder whether you could, in relation to that

1 particular paragraph, advise whether it has any
2 relationship to the objectives that you described?

3 DR. EULER: A. Yes, it does. It's a
4 prime example of a numerical objectives that I was
5 involved in developing about ten years ago and I will
6 just go through the thinking process.

7 The first question that one has to ask
8 is: How many moose can the land produce? This is very
9 analogous to how fast trees grow on a particular site.
10 There is a particular ability of the land to support
11 moose and we had to say how many moose could the land
12 support. And we looked at all the scientific
13 literature, we used the experience of our people, and
14 we came up with an estimate of something around one
15 moose per square mile which translates into about .39
16 moose per square kilometre or in that range anyway plus
17 or minus a little bit.

18 We said: Under normal conditions of
19 timber harvest and all the problems that a moose has in
20 coping with the weather and predators of northern
21 Ontario, a goal is something on the order of one moose
22 per square mile or just a little below .39 moose per
23 square kilometre.

24 We then looked at the number of square
25 kilometres of moose range available and calculated then

1 that we could support something on the order of 160- to
2 180,000 moose in Ontario and we picked the lower side
3 of that range in order to be conservative and have a
4 good chance of actually meeting the target.

5 Because as a professional, one of the
6 things that I want to do is set a target and then I
7 want to meet it. So the target has to be realistic.

8 So we used science, we used experience of
9 people and we came to the conclusion that a reasonable
10 target for Ontario by the year 2000 was 160,000 moose.

11 Note that in that paragraph and in that
12 particular part of our discussion, that's a population
13 target. We had a number of extensive discussions then
14 about how many moose could we take by harvesting that
15 and still ensure that the population was healthy or
16 viable.

17 Q. Is that objective or is that target a
18 quantitative target?

19 A. Yes.

20 Q. Is it a quantitative target or
21 objective as contemplated by Dean Baskerville in his
22 writings?

23 A. Well, yes, it is although it is not
24 quite as sophisticated as Dean Baskerville advocates,
25 but it certainly is a quantitative target and it is the

1 kind of target that he advocates that agencies should
2 establish and he would like to see it even a little
3 more sophisticated as much as possible.

4 Q. I understand that we will be dealing
5 with Dean Baskerville's -- some of his writings later
6 in your evidence?

7 A. That's right, and we will get into
8 this in some detail.

9 Q. Just for the record, I am looking at
10 Exhibit 377, Dr. Euler. I don't think everyone need to
11 refer to it, it's the Moose Management Policy dated
12 December the 15th, 1980.

13 There was reference in there for a
14 program target, paragraph 1, which states:

15 "The program target is to increase the
16 moose population from 80,000 to a 100,000
17 animals by 1985, 140,000 by 1995 and
18 160,000 by the year 2000."

19 And I just want to be clear as to whether the reference
20 to 160,000 moose by the year 2000 is set out in the
21 policy is the same 160,000 being calculated and
22 described here on page 20 of the Moose Habitat
23 Guidelines?

24 A. Yes, it is.

25 Q. Thank you. How does one assess

1 whether any particular harvest activity has changed the
2 pre-harvest habitat condition in a positive or negative
3 manner and whether that change is significant for
4 wildlife?

5 A. I talked about the variables that one
6 has to look at a little bit earlier and another point
7 that I would like to make here is the most important --
8 or a very important aspect of that kind of evaluation
9 is the perspective of the management activity.

10 In this case, which is a new slide that
11 was not in our witness statement -- do you wish to put
12 an exhibit number on it?

13 THE CHAIRMAN: Exhibit 475.

14 ---EXHIBIT NO. 475: Hard copy of slide depicting
15 clearcut through the eyes of a
mouse.

16 DR. EULER: In this slide and the next
17 one which is also new --

18 THE CHAIRMAN: Make that 476.

19 ---EXHIBIT NO. 476: Hard copy of slide depicting
20 clearcut through the eyes of an
eagle.

21 DR. EULER: I want to discuss the issue
22 of perspective in both time and space in that if you
23 look at this clearcut through the eyes of a mouse
24 living on the edge of it, you have a certain
25 perspective.

1 On the other hand, if you look at this
2 clearcut through the eyes of an eagle, you have quite a
3 different perspective and from the eyes of an eagle
4 this cut is not important or it is not a bad - to use a
5 negative word - it is not a bad disturbance in terms of
6 its impact on wildlife. It is irregularly shaped,
7 reserves are along streams, there is room for cover,
8 close to cover and so on. And so one has to keep in
9 mind perspective of both time and place as you evaluate
10 these changes.

11 In the years to come, as succession
12 occurs on this clearcut it will provide habitat for a
13 range of species such as the ones we showed a few
14 minutes ago on the generalized slide.

15 So when the mouse is looking out at the
16 edge of that clearcut he may be saying some nice
17 habitat is coming along there, and when the eagle looks
18 at that clearcut he may say yes and there is going to
19 be a mouse out there and I am going to try to eat it.
20 And so perspective is extremely important as you try to
21 evaluate these changes in the forest to the wildlife
22 that are there.

23 So just to add another point here, a
24 change can be very significant at a local level, but
25 not as significant when viewed from the broader level.

1 So over a wildlife management unit a small clearcut may
2 enhance the moose population even though it may change
3 the particular moose's activity pattern or it may
4 provide that moose -- it make him more vulnerable to
5 hunting, but we have to keep in mind the population
6 level and the perspective; not necessarily the
7 individual animal or the individual piece of ground on
8 which he lives at a single point in time.

9 Q. And in that example you indicated
10 that the change at the stand level may be significant
11 in terms of a particular animal, but at the larger
12 level it is less significant or may not be significant?

13 A. That's correct.

14 THE CHAIRMAN: Do you want to title those
15 two slides just so we keep the record straight, Dr.
16 Euler?

17 DR. EULER: Could we say through the eyes
18 of a mouse and through the eyes of an eagle. Would you
19 permit that, Mr. Chairman?

20 THE CHAIRMAN: If that is your title...

21 DR. EULER: Okay, then that's what I
22 want.

23 THE CHAIRMAN: So Exhibit 475 will be
24 through the eyes of a mouse and Exhibit 476 through the
25 eyes of an eagle.

1 DR. EULER: Yes.

2 MR. FREIDIN: I am just thinking, Mr.
3 Chairman, how helpful that's going to be a year from
4 now. Can we say clearcut in relation to each of those,
5 clearcut viewed through the eyes of a mouse?

6 THE CHAIRMAN: Probably be the only two
7 slides we'll remember a year from now.

8 MR. FREIDIN: I forget them as fast as
9 they go in, I think.

10 Q. Let's go back to viable populations,
11 Dr. Euler, and deal with that sort of viable target as
12 opposed to that specific number that you might have for
13 a population.

14 How do you know - and I think you have
15 sort of touched on this, but I would like to go into it
16 in a little bit more detail - how do you know whether
17 any species is approaching a rare, threatened or
18 endangered status, which I understand you indicated was
19 one of the things you look at to determine whether you
20 have got a viable population or not.

21 DR. EULER: A. The way you try to
22 understand that is somehow somewhere there has to be
23 some kind of inventory of this animal in the form of a
24 population count or in the form of an index and let me
25 just make clear the difference.

1 When you fly over northern Ontario and
2 count moose you're really trying to estimate the
3 population. We have other kinds of inventory in which
4 we take an index to the population, so you would do a
5 sample plot, for example, and find out how many are on
6 that sample plot and you would make no effort to say
7 how many there are in Ontario.

8 So if you are going to inventory
9 Black-throated Green Warblers, you would do an index
10 count. Now, we have a number of index counting
11 techniques because for most wildlife species that's the
12 only practical way of trying to understand what's
13 happening to their population.

14 So, for example, in Ontario there are two
15 sites at which hawks are inventoried using an index
16 method. One is near Grimsby Ontario where, as the
17 hawks return to Ontario from their winter home in the
18 tropics, they are counted as they go past a point and
19 this represents an index.

20 On their fall return to the tropics, they
21 are counted at another place on Lake Ontario called
22 Hawk Cliff and in those cases, because of land form and
23 the Great Lakes and so on, the hawks are funnelled
24 through relatively narrow places in the landscape and
25 observers can stand there and look at them and count

1 them and that's an index population.

2 There is another location, the Long Point
3 Bird Observatory where other kinds of birds are counted
4 as an index technique. This is often smaller birds.

5 Occasionally activities happen in Ontario
6 such as the Breeding Bird Atlas which was a cooperative
7 project between the Canadian Wildlife Service and the
8 Ministry of Natural Resources and a large number of
9 volunteer groups, coordinated and headed by the
10 Federation of Ontario Naturalists.

11 So in this case the Ministry supplied
12 logistic support and some dollars and volunteers went
13 out and found and located breeding birds and reported
14 that back through the system, and I am sure most of you
15 are aware, then this becomes an index to breeding bird
16 populations.

17 Every winter the Ministry cooperates with
18 volunteers and with U.S. federal agencies to do a
19 mid-winter water fowl survey on the Great Lakes and, at
20 the same time, a mid-winter survey for bald eagles is
21 conducted.

22 In addition to that, there is a special
23 group of people right now who are doing what we are
24 calling a herpetofaunal survey. Herpetofaunal refers
25 to those small creatures called amphibians and reptiles

1 that are usually secretive, live under logs in the
2 forest. They are vertebrates, they have backbones and
3 there is a group of people who are doing a survey of
4 these animals much like the breeding bird survey. The
5 Ministry cooperates with them and helps by giving them
6 money wherever it can or facilities or so on.

7 In addition, we cooperate with both the
8 federal service and some academic professors in
9 developing index counts of other kinds of creatures
10 throughout the province.

11 Q. Dr. Euler, I understand that the
12 Atlas of the Breeding Birds of Ontario is quite a large
13 document?

14 A. Yes, that's correct. It's a book, a
15 couple of hundred pages.

16 Q. Right. And I understand that you
17 have selected a number of pages from that particular
18 atlas and wish to show the Board, through use of
19 selected pages, the type of information that is
20 recorded and other information that you think is
21 relevant in relation to that particular inventory?

22 A. Yes.

23 Q. All right.

24 MR. FREIDIN: Mr. Chairman, I would ask
25 that the document -- the next exhibit be the selections

1 from Atlas of the Breeding Birds of Ontario.

2 THE CHAIRMAN: I think for the record the
3 Board should state that Dr. Eagles, who is one of the
4 co-authors or co-editors of this volume is a member of
5 the Environmental Assessment Board.

6 ---EXHIBIT NO. 477: Selections from the Atlas of
7 Breeding Birds in Ontario.

8 DR. EULER: This is a good example of an
9 inventory index and one has to use it in making
10 judgments about the status of a particular bird
11 species. And subsequent to the atlas, there has been a
12 second effort to look at the bird species that were
13 surveyed in the atlas and pick those that are most
14 threatened or most rare and we are now into a second
15 tier atlas project to try to understand more about
16 these birds that are rare and understand why they are
17 rare and what the problem is with them.

18 MR. FREIDIN: Q. Sorry, Dr. Euler, do
19 you believe it would be helpful to review portions of
20 that document in any way for the Board?

21 A. The Atlas of the Breeding Bird?

22 Q. Yes.

23 A. Sure, we could take a look at what
24 they had and the kinds of information that would be
25 helpful to us as managers of the forest.

1 Q. Well, would you do that, please.

2 A. Yes, I will. I was just trying to
3 pick a good example.

4 Well, why don't we take the
5 Red-shouldered Hawk which is on page 120. We have some
6 pictures of that coming later. So the introduction to
7 the Red-shouldered Hawk is on page 120 of this handout
8 and the first page is just a bit of a summary of
9 Red-shouldered Hawks and their status in Ontario.

10 And then in the next page, page 121, the
11 records that people have observed of Red-shouldered
12 Hawks breeding are recorded. So the map at the bottom
13 of the page has a record of where Red-shouldered Hawks
14 have been observed in the process of breeding in
15 Ontario.

16 And there are various kinds of terms that
17 are used to express it and you can see the symbols of
18 the map represent certain status is really what I would
19 call it. So, for example, if someone saw a
20 Red-shouldered Hawk in a nest with young on the nest,
21 he would say that is a confirmed breeding record.

22 If, on the other hand, he saw two
23 Red-shouldered Hawks going through a courtship display,
24 he would say: Well, since they are doing courtship it
25 is very probable that they will breed, but I haven't

1 actually observed the young. So this would be called a
2 probable. And then, as you can see there is a graph in
3 the upper left-hand corner where people have made
4 estimates of abundance of Red-shouldered Hawks.

5 This is very useful as a range estimator,
6 so you can see by looking in the upper right-hand
7 corner of the page that Red-shouldered Hawks are very,
8 very rare in much of the boreal forest.

9 If you saw a Red-shouldered Hawk in
10 Nipigon that would be a very rare event. On the other
11 hand, if you see one in Huntsville you know that isn't
12 a particularly unusual occurrence and this helps us as
13 we manage these creatures, we would know, for example,
14 that a forest management plan in the Nipigon area
15 really doesn't have to be too concerned about
16 Red-shouldered Hawks because they simply aren't there
17 and probably never were there.

18 Q. And the information that is in the
19 breeding bird atlas, is it information which relates to
20 a particular point in time, or is it in any way
21 indicating population trends?

22 A. It does not indicate population
23 trends. It is like a snapshot picture of a point in
24 time. So one would hope that over the next decade we
25 could do another breeding bird atlas and that would

1 provide two snapshots of points in time and from that
2 kind of evidence then we can make judgments about the
3 status of the population.

4 Q. Are any inventories which indicate
5 population trends conducted or prepared in Ontario?

6 A. Yes.

7 Q. And can you direct the Board to any
8 examples of such population trends?

9 A. Okay. What I would like to do is
10 show the Red-shouldered Hawk again because it is a
11 species of some interest.

12 There, for example, is a graph of
13 Red-shouldered Hawk numbers as counted at the
14 observation point near Grimsby, Ontario.

15 MR. FREIDIN: And that particular
16 document is page 3, Mr. Chairman, of Exhibit 472.

17 THE CHAIRMAN: Thank you.

18 DR. EULER: So, this is just exactly what
19 we have been talking about, it is an index count and
20 so, as you can see, we have titled it -- it is a
21 migration index count from counters stationed at a
22 point on the escarpment that funnels the hawks past and
23 you can see that over the period of time that we have
24 investigated, there seems to be a decline in the
25 species.

1 So every year at the same time people go
2 to the same place and count Red-shouldered Hawks and
3 the records are kept and analyzed and this shows then,
4 based on our knowledge, one would conclude that it is
5 very probable that a decline in this population
6 occurred between '75 and '77 and during '77 to '82, it
7 looks as though it is possible that the population may
8 have stabilized at this lower level.

9 Now, because it did decline like this
10 quite precipitously, this means we should be very
11 concerned about Red-shouldered Hawks

12 Now, once we have gathered evidence that
13 the decline is in place, the next question is: Why
14 have they declined, because this doesn't tell us
15 anything at all about why the hawk has declined, it
16 simply says: Yes, it is possible that a decline has
17 occurred and then we have to take steps to try to
18 identify the reason.

19 This is handout No. 3. Did you -- you
20 mentioned that, okay.

21 Q. Yes.

22 A. Now, handout No. 4 is another hawk
23 species counted at the same place using the same
24 technique. And in this case there is no cause for
25 alarm because we see rises, we see declines - note from

1 '76 to '78 there was a decline - and if you were only
2 looking at that graph between those two years you might
3 have some concern. On the other hand, from '78 to '79
4 there was a dramatic increase in the birds.

5 This relates back to the fact that
6 whenever one looks at data on wildlife this concept of
7 the perspective of time is extremely important. This
8 also illustrates with real data the concept of viable
9 populations that I was talking about earlier. These
10 are normal fluctuations of this species based on the
11 variety of events that affect that species in the real
12 world: Disease, weather, predators, all of those
13 things and from this data we would not be alarmed about
14 Broad-winged Hawk population numbers.

15 This is slide No. 4 and it illustrates
16 another example of a bird species that we are
17 monitoring, the Bay-breasted Warbler.

18 THE CHAIRMAN: This is No. 5 I believe;
19 is that correct?

20 DR. EULER: Yes, that's right. This
21 would be No. 5 of the handout Exhibit 472.

22 Now, this graph is one of those graphs
23 that people could probably legitimately differ on and
24 what we need to do is get more data on this species,
25 because it could easily be that in the next couple of

1 years this line is going to come back up again and that
2 there be no problem.

3 On the other hand, we may be seeing the
4 start of some kind of difficulty with this warbler.
5 And the last graph I have of warblers is the Magnolia
6 Warbler, this is page No. 6 of the handout.

7 MR. FREIDIN: Q. Exhibit 472.

8 DR. EULER: A. And again we are looking
9 at the data and what I would conclude from this is it
10 is extremely important that we continue to analyze and
11 collect this data so we can see whether this trend is
12 going to continue down or whether it really is just the
13 normal fluctuations of a population of birds that is
14 very dependent on insects in the forest.

15 Some of these warblers fluctuate like
16 this quite naturally and have since time immemorial and
17 it isn't anything to be alarmed about. What we must do
18 is keep track and keep records to ensure that what we
19 do does not contribute or cause a major decline.

20 THE CHAIRMAN: Would this be a convenient
21 time, shortly?

22 MR. FREIDIN: Oh yes.

23 THE CHAIRMAN: At this point?

24 MR. FREIDIN: Mm-hmm.

25 THE CHAIRMAN: Okay. Ladies and

1 gentlemen, the Board proposes to rise for lunch until
2 two o'clock.

3 Before we forget, I want to also make an
4 announcement for the purposes of the record. The Board
5 has engaged the services of Mr. Herman Turkstra to act
6 on behalf of the Board with respect to the calling of
7 Dean Baskerville as a witness before this Board.

8 Mr. Turkstra has received some
9 preliminary directions from us in terms of the scope of
10 Dean Baskerville's appearance but we have instructed
11 him as well to be in contact with counsel for all of
12 the parties -- the full-time parties wherein he will be
13 discussing his understanding of the scope of Dean
14 Baskerville's examination before this Board.

15 It has been our instructions to him that
16 Dean Baskerville will be testifying with respect to his
17 report, Exhibit 16, and that part of the Ministry's
18 response to his report which I believe is part of
19 Appendix 7 of Exhibit 4, and it is the action response
20 by the Ministry related specifically to his report
21 because, as we understand it, that action response also
22 deals with matters that are extraneous to his report
23 and that will be the general scope of Dean
24 Baskerville's appearance.

25 Now, Mr. Turkstra will, of course, after

1 or within a very short time, be contacting Dean
2 Baskerville directly to ascertain whether he is able
3 and willing to cooperate in terms of the scheduled
4 appearance.

5 We also have indicated that his
6 appearance will take place at the conclusion of the
7 Ministry's case and we don't know exactly when that
8 will be, but we are anticipating it will be this year
9 and hopefully somewhere around September/October, early
10 November.

11 The location as to where Dean
12 Baskerville's appearance will take place is yet to be
13 determined. It may be that we will hold that
14 examination elsewhere, but that hasn't been determined
15 at this point.

16 MR. FREIDIN: Moncton I think would
17 probably be Dean Baskerville's preference.

18 THE CHAIRMAN: Well, I don't know if we
19 will move the whole show to Moncton, but we may move
20 Dean Baskerville to a location other than Thunder Bay.

21 In any event, we have instructed Mr.
22 Turkstra and indicated to him that there will, of
23 course, be discussions between the Board and himself as
24 Board counsel until the time that Dean Baskerville is
25 actually called, at which time we will not be dealing

1 with Board counsel except in open discussion. We
2 obviously have to have the opportunity to give him
3 instructions and we will want to give certain
4 directions in terms of the scope of this examination
5 after Mr. Turkstra has consulted with the parties. And
6 we, of course, have to be at liberty to settle the
7 terms of his retainer engagement as Board counsel as
8 well. There will not be any discussions between the
9 Board and Mr. Turkstra outside of open session
10 concerning anything to do with the evidence per se, or
11 anything like that.

12 We anticipate that he will be in contact
13 with the parties in the next two to three weeks.

14 Are there any comments by counsel with
15 respect to this announcement?

16 Mr. Freidin?

17 MR. FREIDIN: Not at this time, Mr.
18 Chairman.

19 THE CHAIRMAN: Very well. We will
20 adjourn until 2:00 p.m.

21 ---Recess taken at 12:45 p.m.

22 ---upon resuming at 2:10 p.m.

23 THE CHAIRMAN: Thank you. Be seated,
24 please.

25 MR. FREIDIN: Q. Now, Dr. Euler, I

1 understand that the graphs that you have referred to
2 which are found in Exhibit 472, pages 3 through 6
3 inclusive, are graphs which appear in a document
4 entitled: Population Levels of Tropical Migrants as
5 indicated by Migration Counts, 1961-1985; is that
6 correct?

7 DR. EULER: A. Yes, that's correct.

8 MR. FREIDIN: And I would like to file
9 that document as the next exhibit, Mr. Chairman.

10 THE CHAIRMAN: Exhibit 478.

11 ---EXHIBIT NO. 478: Document entitled: Population
12 Level of Tropical Migrants as
13 indicated by Migration Counts,
1961-1985 prepared by Long Point
Bird Observatory.

14 MR. FREIDIN: Q. Now, could you just
15 show us where in this particular document we will find
16 those graphs?

17 DR. EULER: A. There are graphs on page
18 4 and graphs on page 5.

19 Q. And so the graphs that you showed us
20 then are part of a larger document, the one which has
21 just now been marked as Exhibit No...?

22 A. 478.

23 Q. 478. Could you explain to the Board
24 what the document is then in which those graphs were
25 contained?

1 A. Yes. This is a proposal by the Long
2 Point Bird Observatory to study the population levels
3 of small birds and to analyze their data.

4 Now, the word here tropical migrant
5 refers to small songbirds such as the Black-throated
6 Green Warbler that I showed you earlier. So this is a
7 proposal by this organization to study these birds,
8 essentially using index inventory techniques.

9 Q. And is this sort of document produced
10 by organizations other than the Long Point Bird
11 Observatory, or are projects of the type contemplated
12 in this document performed by groups other than the
13 Long Point Bird Observatory?

14 A. There are other groups that produce
15 similar documents. Yes, this is an example of one of
16 these.

17 Q. And could you just perhaps briefly
18 take the Board through the document and indicate the
19 approach that has been taken in this particular
20 proposed project?

21 A. Yes. This is a document prepared by
22 scientists, the purpose is to obtain funding for the
23 study. So you can see there are a number of things
24 such as the background information to give the reader
25 just a sense of what is happening.

1 The first sentence I will read just to
2 highlight it and the sentence says:

3 "Concern has been expressed recently
4 about declining populations of songbirds
5 that breed in North America and winter in
6 the Tropics."

7 And it goes on to talk about the pros and cons of that
8 concern, is it real or is it not real. And then it
9 proposes a way of testing these hypotheses.

10 The first question is: Is there indeed a
11 decline. That has to be answered first and only after
12 one can determine a decline can you begin to search for
13 the causes of why.

14 So, for example, on page 5 where it says
15 Project Objective, it says very clearly:

16 "The objective of this project is to
17 determine whether or not long-term
18 changes have occurred in populations of
19 tropical migrants that breed in central
20 Canada."

21 So it is consistent with the evidence I showed that the
22 first step in trying to assess a population change in
23 wild animals is to just simply measure whether they are
24 going up or down.

25 The rest of the document contains some

1 budget proposals and a list of the birds that would be
2 considered for study and then some data about the
3 people who are involved in the study.

4 Q. Who was this proposal submitted to.

5 A. To the Ministry of Natural Resources.

6 Q. And are you aware of any decision
7 that has been made on the proposal?

8 A. Yes, a decision has been made to
9 advance them some funding.

10 Q. Thank you.

11 MRS. KOVEN: Excuse me, but that hasn't
12 been done yet?

13 DR. EULER: The decision to advance the
14 funding has been made and in the next fiscal year the
15 funding will go to these people to carry out this kind
16 of analysis.

17 MR. FREIDIN: Mr. Chairman, I would like
18 to take this opportunity to file copies of the
19 interrogatories in Panel No. 10, the answer to
20 interrogatories which in fact relate directly to the
21 evidence of Dr. Euler. I will file the balance of them
22 tomorrow.

23 So perhaps if we could mark as the next
24 exhibit copies of the following interrogatories and
25 answers thereto: MOE No. 3, Forests for Tomorrow No.

1 2, Nishnawbe-Aski Nation -- hold on. I think Ms.
2 Blastorah better tell you how they are organized.

3 Delete what I just said from the record,
4 if you can.

5 THE CHAIRMAN: Is that everything you
6 said this morning or just the last part?

7 MR. FREIDIN: As long as the answers are
8 there.

9 MS. BLASTORAH: Sorry, Mr. Chairman. We
10 probably haven't done this the easiest way possible.
11 We have stapled them by party.

12 So, first of all, there is a group of
13 interrogatories filed by the Ministry of the
14 Environment which are Nos. 3, 14, 16 and 18.

15 THE CHAIRMAN: Do you want these to go
16 under Exhibit 479 A and then go down with the various
17 groups, or do you want it all in one lump?

18 MS. BLASTORAH: Doesn't really matter.
19 They are separate interrogatories, I don't really know
20 that there is any benefit to having them A...

21 THE CHAIRMAN: Okay.

22 MS. BLASTORAH: The next group is Forests
23 for Tomorrow, Interrogatories No. 2, 9, 25, and 29 and
24 lastly Nishnawbe-Aski Nation Interrogatory No. 10.
25 There are 16 pages in total.

1 THE CHAIRMAN: Very well.

2 MS. BLASTORAH: Thank you (handed)

3 ---EXHIBIT NO. 479: MOE Interrogatory Nos. 3, 14, 16 &
4 18, Forests For Tomorrow, Nos. 2,
5 9, 25, & 29 and NAN No. 10 and
6 answers thereto (Panel No. 10).

7 MR. FREIDIN: Q. Now, the Ministry of
8 the Environment Interrogatory No. 14 refers to a paper
9 by Dr. Eagles and includes a copy of Table No. 4 of
10 that particular document; is that correct?

11 DR. EULER: A. That's correct.

12 MR. FREIDIN: Perhaps we could file as
13 the next exhibit, Mr. Chairman, copy of that Table No.
14 4. It should actually form part of the answer to the
15 interrogatory.

16 Perhaps maybe that is the way it should
17 just be filed, just include the Eagles document that
18 you just received, Table 14 -- pardon me, Table 4 as
19 part of the answer to Question 14 from the Ministry of
20 the Environment, if that is the easiest way to do it.

21 THE CHAIRMAN: I think it might be easier
22 practically to give it a separate exhibit number.

23 MR. FREIDIN: Sure, okay.

24 THE CHAIRMAN: Exhibit 480.

25 ---EXHIBIT NO. 480: Document entitled Table 4 by Dr.
Eagles.

1 MR. FREIDIN: Q. Dr. Euler, could you,
2 perhaps in the context of our discussion about
3 population monitoring, describe what this table is and
4 give the Board some idea of the document of which it
5 forms a part?

6 DR. EULER: A. Using the data from the
7 breeding bird atlas that was published in the book of
8 that title, Dr. Eagles took some of that data and
9 arranged it in such a way that the reader can get an
10 idea of the relative abundance of the bird species that
11 were surveyed in this process.

12 Now, it is not a count, so it is not a
13 count of the total birds present, it is relative
14 abundance expressed as a per cent of the frequency of
15 occurrence.

16 So in Table 4, for example, the title of
17 the table is Block Frequency of the Breeding Bird
18 Species in Ontario, species listed in alphabetical
19 order. The block it refers to is the geographical unit
20 that was used, and if you would look under No. 1 it
21 says: Acadian Flycatcher.

22 The Acadian Flycatcher occurred in six
23 blocks and that was 4.38 per cent of the blocks
24 available where they might possibly have occurred. So
25 one would conclude from, the Acadian Flycatcher is not

1 a very abundant bird in Ontario.

2 Now, if you go down to the next one, the
3 Alder Flycatcher, it occurred in 118 blocks for an
4 86.13 per cent occurrence level, thus the Alder
5 Flycatcher is a very abundant bird in Ontario.

6 Now, although that doesn't tell you how
7 many Alder Flycatchers there are, you can conclude that
8 it is an abundant bird and is unlikely to be in any
9 kind of trouble with respect to its population levels.

10 And just for a moment, by going on down
11 to No. 3 you will see the term American Avocet which
12 only occurred in one block or .073 per cent.

13 Now, the reason it occurred in only one
14 block in Ontario is just simply outside its normal
15 range and somehow somewhere while an observer was out
16 there they did observe one American Avocet and it was
17 recorded, but it is not a significant biological fact
18 because it is a western bird that just simply doesn't
19 normally occur in Ontario. Nevertheless someone did
20 see it and so it had to be recorded.

21 So what these data do is help you
22 interpret the abundance or the status of the population
23 level, they give clues to it.

24 Q. Now, we have referred to an inventory
25 proposal by the Long Point Bird Observatory, Exhibit

1 478. Other than that particular proposal - let's
2 assume that it is going ahead - are all the inventories
3 that you have available for all the other species that
4 you have information available, done by the Ministry?

5 A. No, they are not all done by the
6 Ministry.

7 Q. Now, if the Ministry surveys then
8 don't inventory everything; that is, all the species,
9 how do you know if populations of those species that
10 are not inventoried by MNR are approaching rare,
11 threatened or endangered status?

12 A. Well, we would use a variety of
13 information the breeding bird atlas, for example, is
14 one, the herpetofaunal survey that I referred to
15 earlier is another.

16 If there is a concern expressed to the
17 Ministry by members of the public about a species, we
18 commission a status report and, in that case, a person
19 would be hired to go out and actively search the
20 literature and search the countryside for a species
21 that was considered to be in trouble.

22 Q. And I believe you indicated that the
23 Red-shouldered Hawk was a species which was close to
24 getting into those categories that would indicate that
25 there were no longer -- there may not be viable

1 populations?

2 A. Well, we are concerned about the
3 Red-shouldered Hawk, as I indicated in some of those
4 graphs.

5 Now, by expressing a concern, what we are
6 saying is there may well be a serious problem there, we
7 are not entirely sure, and because there might be a
8 problem, we have begun to take some action to deal with
9 it if and when we know there is a problem.

10 And I would like to just point out a
11 couple of things about Red-shouldered Hawks just -- we
12 have talked a lot about them, I would like to show you
13 a picture of them and show you a little bit about where
14 they nest and get some sense about what some of the
15 problems might be.

16 So if I could have the projector on,
17 please.

18 Well, this is a Red-shouldered Hawk. It
19 nests primarily in the Great Lakes/St. Lawrence Forest
20 that we have seen and its nest - and this is a
21 Red-shouldered Hawk in a nursery - and this slide of
22 the hawk in the nursery is No. 28 in the evidence
23 panel, the previous one of just the Red-shouldered Hawk
24 is No. 27.

25 It builds a nest in a tree like this made

1 of sticks and it does this -- as slide 29 shows from
2 the evidence package, it does it high in a tree, in the
3 crotch of a tree in a forest that is reasonably mature.
4 It seems to need mature forest or close to mature
5 forest to build its nest in and to feed. And concern
6 has been expressed about logging activities in the
7 vicinity of Red-shouldered hawk nests.

8 So what the Ministry is doing is
9 developing a program and putting a buffer zone around
10 any Red-shouldered Hawk nests that are observed in the
11 forest and we also have allocated some inventory money
12 to go out and inventory and attempt, as best we can, to
13 locate where these nests are in their normal range.

14 Q. Are there any new developments in
15 relation...

16 MRS. KOVEN: Dr. Euler, I didn't catch
17 why is there a concern about the Red-shouldered Hawk?

18 DR. EULER: Well, if you remember that --
19 you remember that graph I showed, some -- let me just
20 go back. It might be worth taking a quick look at that
21 again. That is slide -- that is handout No. 3, Exhibit
22 472. I will just go back to it.

23 See, this is our status report on
24 Red-shouldered Hawk that we have to date. Well, that
25 graph is cause for concern. Something needs further

1 attention there because the line is down and we don't
2 that it's forest management causing it to come down.
3 We do not know that, but we know something is happening
4 and we should look at all the potential reasons why it
5 is going down.

6 Maybe there have been -- maybe something
7 has happened to them on their wintering grounds in the
8 south, maybe there is a pesticide problem, maybe there
9 is a predation or a weather problem, or maybe there is
10 a problem with forest management. We have to look at
11 all those things.

12 MRS. KOVEN: But the trend for the
13 warblers, for example, are even more extreme on a
14 downturn but you are more concerned about the hawk
15 because it is just a smaller population of them?

16 DR. EULER: Well, that's right and we
17 think that some of those warbler populations are
18 probably well within normal fluctuations. We don't
19 think that's true of the Red-shouldered Hawk.

20 However, you see, you bring up a good
21 point is: We still have concern about this and that's
22 one of the things that we want to continue to do with
23 our funding of this proposal is check these warbler
24 populations as well.

25 And then -- but the same thing also holds

1 true in that just because the population is down that
2 doesn't tell you why it is down, and we need to look at
3 the potential causes. With warblers it may -- warblers
4 winter in the tropics and it may be the destruction of
5 topical forest is a problem more so than destruction or
6 problems in our forest.

7 MRS. KOVEN: But you don't put reserves
8 around warblers' nests because there are so many of
9 them--

10 DR. EULER: That's right.

11 MRS. KOVEN: --and they are not as easily
12 detected?

13 DR. EULER: Yes, that's right. You just
14 couldn't, it would be just totally impractical. The
15 Red-shouldered Hawk is a fairly large bird and, as you
16 can see from that nest, it is a structure that you can
17 actually see that in the forest and if you are walking
18 through the forest marking trees or something you look
19 up and most of our staff call them big stick nests
20 because it is even -- it is observable to almost any
21 observer that there is something in the forest that is
22 of value there and a Broad-winged Hawk nest can look
23 much like this. So what they end up doing is taking
24 care whenever they find a big stick nest.

25 THE CHAIRMAN: Dr. Euler, are these nests

1 or a program like this that you are indicating goes on
2 identifying nests, are nests used frequently by the
3 birds season after season?

4 DR. EULER: Yes, sometimes. I wish I
5 could give you a definitive answer, but I have to say
6 sometimes, because sometimes they do and sometimes they
7 don't.

8 THE CHAIRMAN: So they are not looking
9 for life in the nest--

10 DR. EULER: No.

11 THE CHAIRMAN: --they are just looking
12 for the fact that there is a nest there and, therefore,
13 either the birds will nest there or have nested there
14 in the past?

15 DR. EULER: That's right. It is one of
16 those two. And you see, many a times the forestry
17 technician who is going out in the bush to mark the
18 trees he really doesn't have the skills to know exactly
19 what that is. So what we ask him to do is mark it, put
20 it on a map, and then we try to get a biologist out
21 there to make an analysis of the situation.

22 The problem is these are hard to find.
23 In this particular picture, I deliberately selected it
24 to give you a sense of what it was like, but when you
25 are out there walking in the bush they are not easy to

1 find.

2 MR. FREIDIN: Q. I think we can turn
3 that machine off now, can we not, Dr. Euler?

4 DR. EULER: A. Yes.

5 MR. FREIDIN: Would somebody get the
6 lights, please.

7 Q. Dr. Euler can you advise: Are there
8 any new developments in relation to the subject matter
9 of inventories within the Ministry?

10 DR. EULER: A. Well, I have alluded to
11 that once or twice already, but one of the concerns is
12 that we have a comprehensive monitoring program for
13 wildlife and that's one of the things that we have
14 initiated recently is a program to continue analysing
15 these data that were collected at the Long Point Bird
16 Observatory.

17 You will notice that some of these graphs
18 have stopped at 1981 and the other data are already
19 collected but have to be analysed, so we have allocated
20 money to analyse those data.

21 We also are beginning a program of more
22 comprehensive inventory of some species that are not
23 passing these migration points in the field with field
24 staff and we have just initiated a very extensive
25 survey of our moose habitat monitoring to measure the

1 effectiveness of that as well. So there is a very
2 comprehensive program coming on stream to inventory and
3 monitor wildlife populations.

4 Now, our goal is to monitor all of these
5 wildlife populations or at least representative
6 examples. We might not monitor every single species of
7 warbler that's out there, but we would like to monitor
8 enough warblers to have a sense that the warbler group
9 are stable and viable.

10 Q. Now, this population monitoring
11 program, how will it compare in terms of the process
12 and the product to the inventories such as the one for
13 the Red-shouldered Hawk which resulted in the graph
14 that we have seen?

15 A. Well, it will be very similar so that
16 we can begin the process of keeping track of these
17 populations through time.

18 Q. And is the population monitoring
19 program that you say has begun different from the
20 effectiveness monitoring program which has been
21 developed as a result of the ESSA workshops?

22 A. Yes. The ESSA workshop and the
23 effectiveness project is really addressed to how
24 effective are the moose guidelines in producing moose
25 habitat, which is a little bit different question.

1 Well, the monitoring program is designed
2 to try to say: How are the populations of these
3 animals changing.

4 Q. Timber management takes place at the
5 management unit level. Could you advise me whether
6 that is the level of timber management where wildlife
7 objectives are considered?

8 A. Yes, it is. I think of the timber
9 management plan as the mother plan, if you will, where
10 wildlife habitat management objectives are attained
11 because it is in that process of managing the forest
12 that we can produce the habitat needed to support the
13 populations of wild animals that live out there.

14 Q. Could you explain to me what good
15 planning in a timber management plan means when the
16 plan is looked at from the wildlife perspective?

17 A. Well, a good plan is one that would
18 assist us in achieving our objectives. So if a good
19 timber management plan, in addition to getting wood out
20 of the forest, can produce good moose habitat then we
21 feel that's a successful plan. Or if it can provide
22 habitat for the Bay-breasted Warblers, then we are
23 pleased about that.

24 Q. And in terms of management of
25 wildlife, for example moose, I understand you don't

1 rely solely on the habitat which is created through
2 timber management, but there are other mechanisms
3 through which you -- or tools you use to manage for, in
4 this case, moose?

5 A. That's right. If you remember in
6 that first slide we talked about the main messages and
7 we said habitat is important but it isn't everything,
8 because in managing moose we also have to manage the
9 harvest side of it.

10 If that is not managed properly, then it
11 really can defeat some of the objectives that have been
12 achieved on the habitat side. Or at the same token, if
13 you achieve -- or if you don't achieve good habitat
14 objectives, then your population management activities
15 may not be fruitful.

16 So as wildlife managers we have to
17 balance both the habitat management and the population
18 management. I like to think of it as the old
19 gunfighter at the OK Corral who had two six guns in his
20 holster and you shoot both six guns at different times
21 and in different ways depending on the objective you
22 are trying to achieve. And sometimes you use the
23 habitat six gun, sometimes you use the population six
24 gun.

25 That also then is consistent with the

1 evidence that you should judge us by how well we attain
2 our objectives.

3 Q. Could you explain what wildlife
4 management units are and the role they play in
5 achieving wildlife management objectives?

6 A. One of the things that we have to do
7 is manage wildlife on discreet units of land
8 particularly because if you are going to have hunting
9 of a population, for example, you have to say to the
10 hunter: You may go to such and such a location and
11 hunt. If you don't do that, hunters tend to
12 concentrate in areas that are not too far from
13 population centres and they tend to deplete the
14 population close to the population centre and not
15 harvest it away from the population centre. So you
16 have to spread the hunting effort throughout the area
17 that the hunted species is in.

18 So to do that we have a system of
19 wildlife management units. On the wall here I have a
20 couple of fairly large maps that just illustrate those
21 wildlife management units and we have a handout that
22 gives them in more detail, Exhibit 363.

23 And if you look at 363, if you would turn
24 to page 20 you will be looking at the same page as is
25 illustrated on those large maps.

1 THE CHAIRMAN: Is it your intention to
2 mark the maps, Mr. Freidin?

3 MR. FREIDIN: I don't know if there is
4 anything to be gained by marking the maps of the actual
5 units.

6 DR. EULER: No.

7 THE CHAIRMAN: Okay.

8 DR. EULER: Everything is here in your
9 book. It is just sort of a sample to show you that --
10 if you want to look at them more closely.

11 So if you are looking at page 20 you will
12 see that we have divided the province up into a series
13 of management units and page 20 just shows you some of
14 them.

15 Now, the important point about the
16 wildlife management units is they have to be correlated
17 with items on the ground that a hunter can see and know
18 where he is while hunting.

19 So, for example, you might look in unit
20 35 there just under the word Algoma there is a little
21 note that says: Ranger Lake Road and a little arrow
22 pointing to Ranger Lake Road. So Ranger Lake Road is
23 the boundary of that unit and so a hunter who is out
24 there knows where he is located at any point in time
25 and he knows he is either in 35 or 36.

1 So wildlife management units are
2 primarily administrative units designed to let us
3 manage the hunting aspect of our moose management
4 program.

5 THE CHAIRMAN: Are these units only
6 related to the harvesting side?

7 DR. EULER: Almost entirely with a few
8 very minor exceptions.

9 MR. FREIDIN: Q. And perhaps you could
10 indicate how the habitat side of things gets
11 incorporated into the wildlife management units?

12 DR. EULER: A. Okay. Well, a particular
13 district biologist then would be responsible for a
14 certain wildlife management unit.

15 It is entirely possible that that
16 district biologist may have an unit that is slightly
17 outside his district and that unit may have the
18 intersection of several forest management units on it.
19 And so the biologist then has to translate that
20 information into the habitat decisions he makes with
21 respect to the forest management unit on to the
22 wildlife management unit that he is responsible for.

23 It can be a very complicated exercise to
24 keep the boundaries in mind and yet that is the only
25 way that it is feasible to carry out the management

1 that we have to carry out.

2 Q. And the targets for each of those
3 wildlife management units are the targets that we saw
4 in our review of the Northeastern Strategic Land Use
5 Plan?

6 A. Yes, that's correct.

7 Q. I would like to move on to deal with
8 a section that I have entitled the featured species
9 approach. And could you advise: Is the featured
10 species approach for wildlife management used in
11 Ontario?

12 A. Yes, the featured species approach is
13 the approach we use in Ontario.

14 Q. Could you explain what the featured
15 species approach is and indicate whether timber
16 management plays a role in managing wildlife on that
17 basis?

18 A. Yes. The featured species approach
19 as an administrative technique is that a species is
20 selected and a number of management programs are built
21 around that species.

22 So in Ontario, for example, we feature
23 moose and deer as featured species and we have a number
24 of programs associated with that activity.

25 There are brochures about moose, there

1 are slides shows and films about moose, we talk about
2 moose, we have a hunting program associated with moose,
3 we have non-hunting programs associated with moose, we
4 have research projects on moose. It is featured in our
5 management activities, it is a prominent animal and we
6 do a lot of the work in managing that animal.

7 Deer are provincially featured in the
8 Great Lakes/St. Lawrence Forest, moose are provincially
9 featured in the boreal forest.

10 So when we say featured species, what we
11 mean is the management agency does a great deal of work
12 in managing that species.

13 Now, we also have locally featured
14 species to deal with those concerns that arise that are
15 not really provincial in scope.

16 So, for example, in certain parts of the
17 province there are some times and some places when we
18 have to give a lot of attention to a particular species
19 and it's featured toured locally. So the plans locally
20 deal with it, but they wouldn't necessarily deal with
21 it right across the province.

22 Most forest management plans in northern
23 Ontario have to have something in there about moose and
24 moose management, but not all of those plans have to
25 have something about eagles because eagles only occur

1 in a fairly limited part of northern Ontario.

2 The same in the Great Lakes/St. Lawrence,
3 virtually every plan that's done has to address the
4 issue of White-tailed Deer management. Not every plan
5 will address the issue of Red-shouldered Hawks because
6 they just aren't everywhere.

7 Q. Are there plans that do, as results
8 of local situations, feature Red-shouldered Hawk?

9 A. Yes, there are and other species are
10 featured locally. One plan that was recently prepared
11 down near the Lanark area featured Pileated Woodpeckers
12 because there was a concern in that area for those
13 birds. So special management prescriptions were
14 applied. Presumably there will be some brochures or
15 something produced about that bird in that particular
16 case.

17 I was going to show you a picture of bald
18 eagles. I am sure you have seen them, but you may not
19 have seen their nest structure. And I wanted to just
20 point out the kind of activity that goes on when
21 dealing with the locally featured species of bald
22 eagle. So if I can have the projector on.

23 So I think everyone has seen a bald
24 eagle. You may not have noticed the kind of place they
25 nest but they usually nest in a snag like this or a

1 other tall tree. These are pictures from the witness
2 statement No. 26 and 25. This is 25. The previous
3 slide was 26 from the witness statement.

4 And I wanted to illustrate the way a bald
5 eagle nest is often constructed and the management
6 activity then that has to be undertaken is leave a
7 buffer zone around this nest. And we have a guideline
8 that has been introduced that shows foresters how to
9 leave a buffer zone around the nest to try to ensure
10 the nest site is protected.

11 So in our management approach then we
12 would consider the bald eagles are locally featured
13 where they are abundant and where they need attention.

14 Q. You indicated that moose are normally
15 featured in the boreal I think and the deer are
16 commonly featured in the Great Lakes/St. Lawrence.

17 I would like to refer you back to Exhibit
18 266A which was the first volume of the Panel 7 witness
19 statement and, in particular, page 308 where the
20 wildlife information for use in timber management
21 planning policy is found.

22 Panel 7, in Exhibit 266A, page 308.

23 A. I'm afraid 308 seems to be missing
24 from this volume.

25 Q. Well, perhaps I can deal with it this

1 way.

2 A. Okay.

3 Q. We spent a lot of time with Mr.
4 McNicol in Panel 7 reviewing this document and in the
5 second paragraph on page 308 it talks about:

6 "Habitat data will be collected for
7 threatened as well as endangered species
8 designated under the Endangered Species
9 Act and moose or deer."

10 And Mr. McNicol indicated that moose or deer could be
11 featured and I wanted to ask whether it is an either/or
12 situation?

13 A. It isn't always an either/or
14 situation depending on the location where you are in
15 the province.

16 Moose are featured in the boreal forest
17 where they are the prime ungulate, bear are featured
18 where they are the prime ungulate, but there are areas
19 where the ranges overlap and in those areas both can be
20 featured or the unit may be broken up and one species
21 is featured in one part of the unit, another species in
22 the other part of the unit.

23 It can be a fairly complicated
24 relationship and it can be fairly difficult to judge
25 where is the best place to feature which animal.

1 Q. Are there any new developments in
2 relation to species which are to be featured?

3 A. There are a lot of discussions
4 underway right now within the Ministry discussing the
5 merits of whether or not to feature caribou and where
6 caribou would be featured and under what circumstances
7 they should be featured, because if we feature caribou
8 that has some implications to forest management that
9 have to be carefully reviewed.

10 The biology of caribou is different than
11 the biology of moose, the range of caribou is different
12 than the range of moose, and we have begun a process of
13 establishing where, when and whether it would be
14 important to feature caribou on a provincial basis.

15 Caribou can be featured now on a local
16 basis, but the discussions are associated with the
17 merits of featuring them provincially.

18 MR. MARTEL: Are there any elk in parts
19 of Ontario?

20 DR. EULER: A few. They are remnant
21 animals that have escaped captivity and they have
22 managed to hang on.

23 There are some just south of the Sudbury
24 area, not many of them.

25 MR. MARTEL: There used to be some bison

1 there too.

2 DR. EULER: That's right, a few bison,
3 that's right. We haven't seen the bison in some time,
4 so they may have died out by now.

5 Many many years ago elk were a part of
6 the fauna of Ontario, but that would be
7 pre-colonization by Europeans.

8 MRS. KOVEN: Excuse me. Did you say you
9 are considering the merits of featuring caribou
10 provincially?

11 DR. EULER: Yes.

12 MRS. KOVEN: Well, caribou are located
13 only in the northern part of the province?

14 DR. EULER: That's right, but they do
15 occur over the entire sweep of northern Ontario at
16 least in small quantities and so when we say
17 provincially featured, that would mean that all those
18 northern units that have caribou then would be obliged
19 to carry out caribou management activities.

20 You see, at the moment by featuring them
21 locally they are only featured in specific areas where
22 there is a concern or a problem or something.

23 MR. FREIDIN: Q. Why did the Ministry
24 identify moose and deer as species to be managed?

25 DR. EULER: A. Yell when the program

1 started the Ministry identified moose and deer for both
2 biological reasons and social reasons.

3 Moose is a prominent Canadian animal,
4 people like them, it is easy to have programs about
5 them, they are a popular hunted species. Relatively
6 speaking we know a great deal about their habitat
7 needs. Both of them were generalists and we knew in a
8 rather general sort of way that it would be good to
9 feature a generalist, and so for a combination of those
10 biological and social reasons they were picked as
11 featured species.

12 Q. And you say when the program began.
13 When did the program begin?

14 A. Well, during the mid to late 70s it
15 was quite apparent that both moose and deer populations
16 in Ontario were declining. There was a lot of concern
17 expressed because it was obvious from our inventories
18 and the observation of people that both of these
19 animals were declining severely beyond what would be
20 considered healthy and we were afraid we were going to
21 lose the viable population of moose and deer.

22 And so in order to stop that decline we
23 had to initiate some pretty extensive management
24 programs and change some of our techniques of hunting,
25 for example. We had to impose some very restrictive

1 hunting regulations and we had to restrict hunters of
2 where they could hunt, when they could hunt, the kind
3 of animals that they could hunt and we had to reduce
4 the kill of these animals drastically in order to allow
5 the populations to rebound.

6 At the same time we had to start some new
7 programs of habitat management and begin to develop our
8 management tools more diligently and with more skill.

9 Q. Now, can I refer you to -- I
10 understand that at page 519 of the witness statement,
11 Dr. Euler, there is a passage that you believe may have
12 caused some confusion or misunderstanding and you would
13 like to address a portion of the evidence on page 519?

14 A. Yes. I just want to speak to this
15 item briefly in that in picking moose and deer to
16 feature I want to make it clear that they were featured
17 because they were Canadian animals, popular game
18 animals and a relatively great amount was known about
19 them. We did not pick them because of the spinoff
20 benefits that would accrue.

21 Now, that may seem like a slight
22 difference but I do want to make that clear. It was
23 after we picked them and initiated these management
24 programs that we began to look at the question: Well,
25 how does that affect the other creatures that live in

1 the forest. And we went through some evaluation
2 programs which we will talk about in a minute to try to
3 address that issue.

4 But in picking those species to feature,
5 we picked them more because of the poplar nature of
6 them, because we knew something about their biology and
7 because we had major hunting programs associated with
8 them.

9 Q. And what are the spinoff benefits
10 that you indicated, subsequent to initiating the
11 featuring of moose, were occurring. What were those
12 spinoff benefits?

13 A. In analysing this question, because
14 that is the obvious question that comes up, you have
15 picked moose and deer to feature, what are the results
16 then, what kind of habitat is produced for the other
17 wildlife that live in the forest.

18 And so over time and with some effort by
19 reading the literature and so on we began to try to
20 analyse, well, just what is the effect, what kind of
21 habitat is produced.

22 And we came to the conclusion that
23 something on the order of about 70 per cent of the
24 other vertebrates that live in the area of the
25 undertaking have habitat provided for by these

1 guidelines, and about 30 per cent - and these are very
2 approximate numbers - may not have habitat provided for
3 in the habitat management programs that we use to
4 provide habitat for moose and deer.

5 Q. Were there any sources other than the
6 literature which led to the belief that there are
7 spinoff benefits for other wildlife as a result of
8 moose management?

9 A. We had some studies done in Ontario
10 on this and we have used the knowledge of field staff
11 and our general knowledge of forest ecology to come to
12 that conclusion.

13 MR. MARTEL: If you look at 30 per cent
14 for which habitat was not provided for under the
15 guidelines, is there anything in place which in fact
16 protects those vertebrates that live in those areas to
17 ensure that they have proper habitat?

18 DR. EULER: We are just trying to come to
19 grips with that now and we think that we can provide
20 for those other 30 per cent with two relatively simple
21 guides, rules, suggestions and we are coming to that.

22 The problem is two-fold: The animals
23 that don't have habitat provided for fall into two
24 categories: One are the snag species, species that
25 live in holes in trees for example. Some ducks nest,

1 woodpeckers nest in holes in trees; the other category
2 are those species that need large areas of mature to
3 overmature forest.

4 Now, the problem that we run into is that
5 we have, in the snag species for example, the
6 Occupational Health and Safety Act suggests and
7 mandates actually that a woods worker must cut those
8 trees down. Well, that is a difficult issue because we
9 understand the potential danger the snags present to
10 woods workers and we certainly are concerned about that
11 as well. At the same time we need to provide habitat
12 for wildlife that need snags.

13 So we are trying to come to grips: What
14 is the best way to solve that. Now, some of our
15 districts have established ground rules in the FMAs
16 that say leave wherever possible a certain number of
17 snags per hectare. Well that, we think, is beginning
18 to address that problem. We have got to do some more
19 work in that area.

20 The other way we are working on it is
21 working with the forest management planning process to
22 try wherever we can to leave larger areas of uncut
23 forest. Now, that is a very complicated issue and it
24 takes a lot of innovative thinking to make that happen
25 in the forest management planning process, but we are

1 trying to come to grips with that.

2 The conclusion of all that is if we
3 implement moose and deer guidelines and if we can
4 successfully implement these other rules or guides, we
5 think we can provide habitat for virtually all of the
6 vertebrates that live in the area of the undertaking.

7 And just let me just add one point. See,
8 if we provide habitat for them, that is the first step
9 but it doesn't guarantee they are going to be there
10 because they still may be killed on their trip to south
11 America to spend the winter, but at least we have done
12 our part by preparing habitat for them in Ontario.

13 Now, based on our current knowledge using
14 things such as the breeding bird atlas, our counts at
15 the hawk watch, we are concerned and we believe that of
16 that 30 per cent I referred to we don't have any major
17 problems with the possible exception of Red-shouldered
18 Hawk which we are again implementing some programs to
19 deal with.

20 But of the 30 per cent, we don't feel we
21 have a problem right now. The concern is that we
22 initiate programs now to ensure that there isn't a
23 problem 10 or 20 years from now.

24 For example, the 30 per cent includes
25 what we call these area sensitive mature forest

1 species. The Pileated Woodpecker is an example. It
2 needs fairly extensive mature to overmature timber and
3 as near as we can tell, based on the evidence we have,
4 Pileated Woodpeakers populations are holding their own.
5 So at the moment we don't have a concern that they have
6 gone into this rare category.

7 At the same time we don't want to sort of
8 sit back and rest on our laurels and say: Well,
9 they're okay now, they will probably always be okay,
10 but we want to initiate the monitoring program.

11 Second we want to have a careful and
12 complete look at what is happening to the age structure
13 of the forest. As I think you have heard, the current
14 age structure of the forest in Ontario is biased
15 towards this older age-classes. So that would suggest
16 as of right now these area sensitive old growth species
17 are probably not in any trouble and we have no evidence
18 that they are in trouble.

19 As soon as we get some, we'll begin to
20 take management actions.

21 MRS. KOVEN: Excuse me, Dr. Euler. You
22 mentioned just a moment ago about the benefits of
23 possibly increasing the size of uncut areas for
24 habitat.

25 DR. EULER: Mm-hmm.

1 MRS. KOVEN: Did you attribute earlier on
2 a decline in moose populations to the large clearcuts
3 that became more evident during the 1970s?

4 DR. EULER: In my opinion the clearcuts
5 did not contribute significantly to the decline of
6 moose.

7 THE CHAIRMAN: What did?

8 DR. EULER: In my opinion it was too many
9 were shot by hunters. And let me hasten to say, I
10 don't want that interpreted as blaming hunters because
11 after all it is the Ministry of Natural Resources that
12 imposes regulations and the hunters were simply doing
13 what the regulations allowed them to do.

14 Now, what the Ministry did is, as soon as
15 we observed this decline, we put management action in
16 place to stop the decline and we think that most of the
17 reversal or much of the reversal in moose and deer
18 populations has occurred because of the very strict
19 restrictions we put on hunting.

20 MR. FREIDIN: Q. And you indicate in
21 relation to the 30 per cent, the area sensitive species
22 and the species which are snag dependent that you would
23 want to initiate the monitoring program. And what
24 monitoring program are you referring to, and are you
25 initiating it?

1 A. Yes, this is the one we referred to
2 different times. See, part of the monitoring program
3 is working with the Long Point Bird Observatory to keep
4 track of those, part of it is the Ministry will be
5 initiating some monitoring programs in northern Ontario
6 for species that are not covered at either Long Point
7 Bird Observatory or the hawk migrations, and we have
8 initiated some specific inventory money to inventory
9 specific areas like bald eagle nests and that sort of
10 thing.

11 Q. Now, could we come back to the 70 per
12 cent, if I might, the 70 per cent which you said the
13 Ministry learned were benefitting from the management
14 of the featured species of moose. I think I said
15 moose, but would I be correct to say moose and deer?

16 A. Yes.

17 Q. Could you advise which species are
18 benefitted through moose and deer programs and on what
19 basis are you able to make the statement, other than
20 the information that you have referred to already?

21 A. This is where the featured species
22 paper comes into play that James Baker and I did and
23 this paper is a fairly exhaustive summary of all of the
24 vertebrates that breed in the area of the undertaking.

25 MR. FREIDIN: Now, that document, Mr.

1 Chairman, is Exhibit 433.

2 Q. And I understand, Dr. Euler, that you
3 were going to review that paper, take the Board through
4 it and indicate how the information contained therein
5 speaks to this spinoff benefit situation.

6 But I would ask that when you do that,
7 could you explain the relationship between that paper,
8 the featured species paper by you and Mr. Baker, and
9 the Baker paper which we find at page 624 of Exhibit
10 416B which is the second volume of the witness
11 statement for this panel.

12 So that is page 566, the paper by Mr.
13 Baker entitled: The Classification of Habitat of
14 Terrestrial Vertebrates Within Forest Management Units
15 of Ontario. And, as I say, when you go through the
16 featured species paper, would you please explain what
17 the relationship is between the two documents.

18 A. Okay. One of the questions that is
19 immediately obvious when it is made clear that we do
20 featured species management is, of course: Well, what
21 is the impact on other species.

22 And in order to analyse and evaluate
23 that, we have to take all the information available
24 about those other species and get it into a form that
25 is easy to use. There are hundreds of papers published

1 on the ecology of wildlife species in Ontario and you
2 couldn't possibly read them all or understand them all
3 or reduce them into summary form.

4 So the first step was to take that
5 knowledge and reduce it into a form that was handy and
6 easy to see. That is what we asked Mr. Baker to do and
7 his paper here on 566 is that, it is an amalgamation, a
8 summary of the habitat requirements of all of the
9 vertebrates that breed in Ontario.

10 He did that by reviewing the literature,
11 by talking to people who are active ecologists in
12 Ontario, and he summarized this into these tables and
13 charts and he categorized each of these species by the
14 habitat in which they live and by the food that they
15 eat.

16 It is not necessary to go through all of
17 that, it is just to understand that that paper is an
18 amalgamation of information from a variety of sources.

19 The next step then in the process is to
20 say to ourselves, when the moose guidelines are
21 applied, how will these other species very likely react
22 and that is what Mr. Baker and I did in this paper
23 called the featured species paper.

24 So I think rather than go through this
25 entire paper page-by-page, what I might do is highlight

1 a couple of tables to give you a sense of what we did
2 and to let you then -- I am sure you will be interested
3 in reading this tonight page-by-page and word-by-word,
4 so I will give you some guidance about how to read it
5 later tonight.

6 THE CHAIRMAN: Are you a betting man, Dr.
7 Euler?

8 MR. FREIDIN: They read it before they
9 came in.

10 MRS. KOVEN: I have already read it.

11 DR. EULER: Good. Well, let's talk about
12 Table 1 then for example. On page 19 the tables begin,
13 Tables 1 to 23, and if you look at Table 1 it says:

14 "Boreal forest wildlife species that
15 prefer edge or early successional plant
16 communities for all or part of their
17 habitat requirements as provided for in
18 the Moose Habitat Guidelines."

19 So what we have here are the species that are
20 benefitted by the moose guidelines and we have taken
21 one category, edge or early successional species, and
22 these species then are part of the 70 per cent.

23 So, for example, just to pick a mammal,
24 how about the Northern Short-tailed Shrew. Well, that
25 is a mammal that prefers the edge or early successional

1 plant communities. When the Moose Habitat Guidelines
2 are applied, there will be plenty of edge or early
3 successional plant communities available, therefore,
4 there will be adequate habitat for Northern
5 Short-tailed Shrews.

6 Now, that doesn't tell us anything about
7 the population of Northern Short-tailed Shrews it just
8 tells us that there is plenty of habitat for them.

9 So if, for example, some disease had just
10 swept through northern Ontario which killed all the
11 Northern Short-tailed Shrews there might be habitat
12 there but no shrews. Okay. So I just want to make
13 sure that that point is clear.

14 Now, if you look then on the table the
15 other species are all species in the 70 per cent that
16 benefit from that particular aspect of applying the
17 Moose Habitat Guidelines.

18 Now, the other tables then each speak to
19 various aspects of the Moose Habitat Guidelines in some
20 detail. So then it might be worth our while to look at
21 a table that deals with the 30 per cent.

22 And if you would, would you please turn
23 to Table 20. The title of table 20 is:

24 "Boreal wildlife species that may not
25 have adequate habitat by implementing the

1 Moose Habitat Guidelines."

2 These are part of the 30 per cent that we have referred
3 to in our general statement. So, for example, the
4 boreal owl may not have adequate habitat provided for
5 by implementing the Moose Habitat Guidelines and we may
6 need to take some other actions to ensure that boreal
7 owls have adequate habitat.

8 You will note in Category 3 we have
9 specified species that require snags and prefer moose
10 winter concentration areas and a good example there is
11 the Yellow-bellied Sapsucker.

12 MR. MARTEL: Do you sometimes make the
13 snag in terms of maybe girdling trees or...

14 DR. EULER: Sometimes that is done as
15 part of our management program, yes. Sometimes it is
16 done as part of the forest management activity
17 primarily. I don't know of any place where a wildlife
18 person has gone out and actively made a snag, but it
19 may well happen.

20 MR. FREIDIN: Q. So in general terms
21 then, could you sort of capsulize why you believe the
22 70 per cent, which are represented by or listed in all
23 of these tables, benefit from the management of moose
24 or deer?

25 A. They benefit because in providing

1 habitat for these animals we also provide habitat for
2 the 70 per cent that, while they are not specifically
3 managed for, the habitat provided in the moose and deer
4 guidelines does provide habitat for them.

5 THE CHAIRMAN: Dr. Euler, is there any
6 species that would increase the percentage if you
7 managed for it rather than moose or deer or are they--

8 DR. EULER: Oh yes.

9 THE CHAIRMAN: --the two species that
10 encompass the highest percentage of other species?

11 DR. EULER: Oh. In my opinion, they are
12 the two species that encompass the highest per cent of
13 other species.

14 See, if we were going to get everything
15 what we should do - and we may well do this as we
16 evolve - is we would feature moose and deer
17 provincially and then pick one of those area sensitive
18 mature forest species and feature that as well, like a
19 Pileated Woodpecker or something. And that might deal
20 with both snags and area sensitive old, older forests
21 as well.

22 So if we featured maybe three species
23 instead of the one, we probably could provide habitat
24 for everything.

25 Now, there are pros and cons of that, as

1 you can imagine, and there are other approaches which
2 we are going to talk about in a minute but that would
3 be a choice and a reasonable one.

4 MR. FREIDIN: Q. At the present time the
5 populations of the 30 per cent, based on the
6 information you have, are not in a difficult stage
7 other than I think you indicated the Red-shouldered
8 Hawk?

9 DR. EULER: A. We are concerned about
10 the Red-shouldered Hawk, that's right. The others
11 appear, to the best of our knowledge, to be stable and
12 viable.

13 Q. Is featured species the only approach
14 that can be used for management of wildlife?

15 A. No, it isn't, and I would like to
16 address that by using a slide. So if I could have the
17 lights and the projector, please.

18 Now, this is a new slide, it is on your
19 handout on page No. 7, Exhibit 472.

20 What I wanted to show in this
21 illustration is the various management approaches that
22 have been taken across North America and this
23 represents a continuum of complexity of management and
24 that is all it is. What I am saying is: Those
25 management systems on the left end of the continuum are

1 relatively less complicated than management schemes on
2 the right end of the continuum.

3 It is not intended to judge the quality
4 of the system, although one certainly will make
5 judgments about that; the continuum is intended to show
6 the complexity of the management approach.

7 About 25 or 30 years ago in North America
8 the general approach was to manage for diversity.
9 Papers were written, management programs were devised
10 and the theme of the management program was, if you
11 manage for diversity you will supply the needs of all
12 the wildlife that are present.

13 This carried on for some number of years;
14 however, as the science of wildlife management changed,
15 it was deemed more appropriate to go to the featured
16 species management which was a little more complicated
17 but was also designed in such a way that you could
18 manage two objectives.

19 When you manage for diversity it is very,
20 very hard to manage for a clear target or a management
21 objective. And Dr. Baskerville talks about this in his
22 writings quite extensively about -- and he often refers
23 to the fact that if you manage for diversity it has
24 very little meaning in a real world timber management
25 plan because it is hard to come to grips with what

1 exactly is diversity.

2 Featured species management let's you go
3 to the next step, whereas in Ontario, we have some
4 pretty clear population goals - 160,000 moose by the
5 year 2000 - and we feature that animal and we devise
6 management programs then to encourage those animals to
7 exist.

8 In more recent years a more advanced
9 approach has been to use the indicator species
10 management approach and this means that you select
11 species to manage for that indicate something about the
12 forest.

13 So, for example, if you manage for
14 Pileated Woodpeckers that would indicate that you had
15 some mature fairly extensive forest in the vicinity.
16 Now, by picking appropriate indicator species then you
17 could supply the habitat needs of all the wildlife
18 present if you are sufficiently skilled in picking
19 which species to manage for.

20 So, for example, if you were to manage
21 for wolves, in order to have wolves you would have to
22 have something for the wolves to eat; i.e., moose or
23 deer, and in order to have moose or deer, you would
24 have to have the plant communities to support the moose
25 or deer, so one could say the best way to initiate a

1 wildlife habit management program is simply manage for
2 wolves.

3 This has the advantage in that it is
4 quite clear and various objectives can be developed and
5 you can manage are for those objectives and you can
6 study the indicator species very carefully and develop
7 management programs around them.

8 The problem that it involves is it is
9 very hard to pick a good management indicator species.
10 So, for example, if you were going to manage for moose
11 as an indicator species, you find that it deals with 70
12 per cent and then you have got to pick some other
13 species to manage for as well and it is hard. It isn't
14 that it can't be done, it is just it is difficult and,
15 as you see on the continuum, it is a more complicated
16 management activity than the other approaches.

17 THE CHAIRMAN: In any event, there would
18 have to be a number of indicator species?

19 DR. EULER: That's right.

20 THE CHAIRMAN: Because there is not one
21 species that would--

22 DR. EULER: That's right, exactly.

23 Now, the U.S. Forest Service for example
24 has adopted this approach throughout the national
25 forest lands in the United States.

1 Now, they call these species then - they
2 just put the word management in front of indicator and
3 by law they must find and identify management indicator
4 species for each national forest that they have a
5 timber management plan for.

6 And they go through a very complicated
7 process of picking those species. They have public
8 meetings, for example, and they ask the public: Which
9 species do you want to us to use as management
10 indicators and there are advocates for various species.

11 And once they have them picked, then they
12 develop management plans based on these indicator
13 species and there are problems with it. Some of the
14 leading wildlife biologists in the States are saying:
15 Don't go this way, it is too complicated and it isn't
16 worth it. You can do the job better in other ways.
17 And they say you never get -- you never get all the
18 species covered under your indicator species
19 management.

20 Well, that is a controversy that is not
21 settled yet and my purpose here is not to solve that
22 controversy just to tell you about it.

23 Now, the last step on this continuum, the
24 multi-species management, is really where the vanguard
25 of wildlife managers are now. This is where Dr.

1 Baskerville would be. And in this point on the
2 continuum you would develop management plans for a
3 number of species in the area that you are responsible
4 for managing.

5 The technology that makes this possible
6 is a computer. Before the computer you could never do
7 this, but the technology is advanced to the point now
8 where the habitat needs of virtually all the
9 vertebrates out there can be put into a computer and
10 then using models like the one that was shown here,
11 AWOSFOP that the foresters use to demonstrate the
12 habitat -- or the supply of timber, by marrying those
13 two models together, the wood supply model and the
14 habitat model, you can come up with a multi-species
15 management approach that is definitely a very good
16 approach.

17 But it also comes at a price and it comes
18 at a very high price, because you have to have the
19 technology in place, you have to have the geographical
20 information system, you have to reduce all of the
21 knowledge of these species into the computer and that
22 is a big, big job.

23 I don't know of any jurisdiction in North
24 America that is fully into multi-species management.
25 The one area that I know that seems to be leading is

1 New Brunswick and I think they have something on the
2 order of 15 or 20 species in their computer models at
3 this point in time.

4 Now, Ontario is really right here on this
5 continuum of complexity of management. We use the
6 featured species approach, we are supplementing it with
7 some other rules or guidelines and, as of this point in
8 time, we feel that this has been a useful approach and
9 we believe that we do not have any serious problems
10 with viable populations in Ontario.

11 Our concern is what would happen in the
12 next 50 to a hundred years, and I think it is quite
13 clear that in the next 50 years efforts will have to be
14 made to move more towards the righthand part of that
15 continuum and use modern technology, computers and so
16 on, to get into multi-species management.

17 THE CHAIRMAN: What kind of lead time is
18 built in, do you think, in terms of not having a
19 problem now but not being caught in a position of
20 having a problem later on, of not having the
21 appropriate databases with which to deal with them?

22 In other words, how far ahead do you have
23 to work, in your opinion, to stay ahead of the game?

24 DR. EULER: I think about a decade.

25 THE CHAIRMAN: Ten years?

1 DR. EULER: Yes, I would think so. That
2 is the sort of timeframe that you need to have a sense
3 of what is happening to your population to know whether
4 those fluctuations are normal or abnormal.

5 Now, to get into full multi-species
6 management - this is where Gordon Baskerville talks
7 about how you have got to get through a complete
8 rotation, you have to get into that planned forest. So
9 to get into that completely is a full rotation at a
10 minimum. So there you are talking about a hundred
11 years or maybe more.

12 I see the multi-species management is
13 kind of a vision, a goal to be striving for and be
14 working towards and I would hope, as a professional
15 biologist at least, that we might leap over the
16 indicator species management and go right to this part
17 on the continuum because I am convinced, based on my
18 discussion with the U.S. authorities, that it wouldn't
19 be good for us to stop here. They are just having too
20 many problems.

21 MR. FREIDIN: Q. Here being the
22 indicator species management?

23 DR. EULER: A. That's right, yeah.

24 MR. MARTEL: Can New Brunswick move to it
25 quicker than us because of the size of the province as

1 opposed to, let's say, northern Ontario?

2 DR. EULER: Certainly that's a component.
3 They can move there more quickly than we can because of
4 size, that's right.

5 It is also true that some of -- well,
6 like Dr. Baskerville is clearly a leading light in
7 advocating this and he has been a guru in this approach
8 and perhaps some of his students there have been more
9 willing or more able to move into this.

10 We have been hiring some of the people
11 from there and some of our people are working very hard
12 to lay the groundwork for multi-species management as
13 well. There is -- a lot of groundwork has to be laid
14 because you have got to get the knowledge of the
15 habitat requirements of those wild animals and then you
16 have got to get it in a form that's useful because you
17 can't take a hundred papers on black-throated green
18 warbler habitat and give it to a forester and expect
19 him to sit there and read and understand it; you have
20 got to amalgamate that into something that he can use
21 in the real world in a practical way and then you have
22 got to do that for 309 species. Well, that's quite a
23 job.

24 THE CHAIRMAN: Dr. Euler, if I understand
25 what you are saying, that really to test any

1 multi-species management program you would have to wait
2 at least a rotation age?

3 DR. EULER: To really get into it, yes,
4 that's correct.

5 THE CHAIRMAN: Before you get, I take it,
6 any real imperical evidence--

7 DR. EULER: Yes.

8 THE CHAIRMAN: --other than what the
9 model might tell you should occur.

10 DR. EULER: That's right, yes.

11 THE CHAIRMAN: Then wouldn't there be so
12 many other factors that would play a part in that
13 period of time such as new chemicals, pesticides, new
14 industrial problems, climatic changes, et cetera, that
15 how would you ever be in a position really to know that
16 the model you developed 80 years prior was really
17 operating and working?

18 DR. EULER: That's right. That's a very
19 good point. Unless you are Methuselah and you can live
20 through about seven revolutions of this whole process,
21 that's right.

22 MR. MARTEL: Can you not do it by adding
23 a certain -- having a target of a certain number of
24 additional species every so many years?

25 DR. EULER: Yes, that's one way. Another

1 way is to get your focus down to a relatively small
2 piece of land so that you don't try to cope with all of
3 northern Ontario at once, but you start an experimental
4 area and then, as you say, instead of trying to start
5 with the full array of 309 vertebrates, you start with
6 10 and you track it for a decade and you see how you
7 are doing and as you -- then you build your knowledge
8 slowly and carefully.

9 One of the things you do then at the same
10 time is you try to be aware of research in other parts
11 of the country; for example, in tropical forests for
12 example, and if you know that some of the birds that
13 live and breed here have been killed by a pesticide in
14 Florida, then you factor that into your management
15 process and you say: Well, it just wasn't something
16 that happened in Ontario, it happened in Florida.

17 What we are talking about is often called
18 adaptive management. We are going to get into that
19 more, but adaptive management, the idea of testing
20 hypotheses, seeing how they work and then coming back
21 and re-evaluating what you have done with new
22 hypotheses.

23 THE CHAIRMAN: Well, I hate to sort of
24 flog a dead horse but I want to try and get this
25 straight. If in fact you feel that multi-species

1 management is sort of an elusive utopian goal which you
2 may never reach in full - and even if you did you may
3 not be able to evaluate whether what the results you
4 found were really a product of that management or some
5 other factors beyond your control - what is the point
6 of trying to move to a system like that because of the
7 lengthy time span within which you can test its
8 effectiveness, as opposed to staying somewhere towards
9 the middle of that spectrum where at least the results
10 can be measured more effectively every decade or so?

11 DR. EULER: Mm-hmm. Well, sure, that's a
12 thoughtful point. I guess where I am coming from as a
13 professional biologist is I think featured species
14 management is good and I think we are doing well with
15 that.

16 I guess when I try to look down the road
17 it strikes me that by the time we reach 50 years from
18 now the managers who are here are just going to have to
19 have much more information at their disposal. The
20 pressures on the forest are going to be more, the
21 perturbations that occur in eco-systems are going to be
22 much more extensive and I think we have a better chance
23 of coping with that if we enter this computer age
24 more --

25 THE CHAIRMAN: Why can't you use the

1 computer age with one of these less complex management
2 techniques? In other words, why can't you utilize the
3 benefits of computers to feed in more data and more
4 numbers and whatever into featured species management
5 or indicator species management?

6 DR. EULER: It isn't that you can't use
7 them, it is just that in featured species management
8 there is no real need to use them.

9 You see, if in Ontario we do featured
10 species management, we feature moose and deer
11 provincially and then we can establish two other rules
12 to take care of virtually everything else, then we
13 don't really need a lot of computer time.

14 THE CHAIRMAN: No, you don't need
15 computer time but if you could, for instance, develop
16 better techniques to take actual counts, for instance--

17 DR. EULER: Oh yes.

18 THE CHAIRMAN: --and use computers to try
19 and keep track of that kind of data--

20 DR. EULER: Yes.

21 THE CHAIRMAN: You could then shore up--

22 DR. EULER: The features --

23 THE CHAIRMAN: --some of the gaps in
24 featured species management rather than trying to do
25 the same type of thing for 309 species.

1 DR. EULER: Yes, that's right. Well,
2 that's right. That's right, that's a very good point,
3 and that is -- that would be a good approach and it
4 would work very well and I would not -- as a
5 professional, I would not be unhappy with that
6 approach, not at all.

7 I would see it as an option, a clear
8 possible option. Another option would be to go towards
9 the multi-species management. And if you looked at the
10 cost of it, the multi-species management option is
11 going to cost a lot more money and it might be in the
12 interest of Ontario to not spend that much money and to
13 stay with what we have and improve what we have. It is
14 a very thoughtful point.

15 MR. FREIDIN: Can somebody turn the
16 lights on.

17 Mr. Chairman, would this be an
18 appropriate time for a break?

19 THE CHAIRMAN: Yes, it would. We will
20 take a break for 20 minutes. Thank you.

21 ---Recess taken at 3:30 p.m.

22 ---Upon resuming at 4:05 p.m.

23 THE CHAIRMAN: Thank you, ladies and
24 gentlemen. Please be seated.

25 Mr. Freidin, this might be an appropriate

1 time to get an indication from you of where we are, how
2 long we are going to be, and where we are going and
3 what time we should sit to today.

4 MR. FREIDIN: I'm less than halfway.

5 THE CHAIRMAN: Less than halfway. So it
6 looks like we won't get to Mr. Tuer, by tomorrow
7 anyways.

8 MR. FREIDIN: That's in terms of pages,
9 but I am assuming if we -- I don't think we will
10 finish. Well, if we finish tomorrow, it will be right
11 at the end of the day. I think we will probably fill
12 the time up.

13 THE CHAIRMAN: So what are you
14 suggesting? I mean, is there a reasonable chance of
15 finishing by tomorrow if we start at 8:30 and finish,
16 say, at 1:30?

17 MR. FREIDIN: I can't tell. Maybe we can
18 revisit that question about five o'clock or 5:15.

19 THE CHAIRMAN: Okay. Is there any -- I
20 guess what we are trying to ascertain - and maybe we
21 will look at it in an hour - is there any point trying
22 to sit longer today in order to try and finish off
23 tomorrow, or will it make much difference if we finish
24 off on Monday?

25 MR. FREIDIN: Right now it is my sense

1 that it wouldn't make a lot of sense to sit late
2 tonight. I don't think we should sit late and, as I
3 said, let's see how fast we go. Maybe I will skip some
4 questions. I would like to finish today.

5 Q. Now, Dr. Euler, I want to sort of get
6 back and deal perhaps in a little bit more focused way
7 with habitat which is of benefit to moose and,
8 therefore, a benefit to these other species that you
9 have referred to.

10 Could you just describe for the Board the
11 various types of habitats which are required by the
12 featured species of moose?

13 DR. EULER: A. Yes, and maybe what we
14 will do is just go back and review those slides again
15 and help provide a mental picture of what good moose
16 habitat is.

17 So if I can have the projector on,
18 please, and perhaps we could put that tray back to the
19 second slide in the tray. This will be photo No. 1
20 from the witness statement and we have seen it already
21 today.

22 THE CHAIRMAN: Mr. Freidin, we don't seem
23 to be moving forward here we seem to be moving back.

24 MR. FREIDIN: Then we will finish sooner.
25 Way back.

1 DR. EULER: Okay, that's fine, thank you.
2 That's the boreal forest of course with the mosaic that
3 we talked about.

4 Now, the moose habitat then - moose need
5 this: They need early successional stages and the best
6 moose habitat will have these early successional shrub
7 communities over about 40 per cent of the area that is
8 in place. They need this because they eat it. So they
9 need a well-stocked larder. That's important. They
10 get this habitat following a disturbance. Now, this is
11 slide No. 1 from the witness statement.

12 The second component of good moose
13 habitat is aquatic feeding areas where they get the
14 aquatics from plants growing in the water. The best
15 moose habitat has about 5 per cent of the land area in
16 aquatics.

17 The third component are these early
18 winter areas which are also the upland areas, but
19 contain browse and are often on the well-drained
20 uplands. And when the land area is about 40 per cent
21 in this upland deciduous category, that helps
22 constitute the very best moose habitat.

23 The last component of good moose habitat
24 are these mature trees where the moose find shelter
25 against winter weather, against predators and

1 occasionally against the heat of summer. And when the
2 area has about 15 per cent of these in these mature
3 conifer, that constitutes the best moose habitat.

4 So what I am doing there is describing
5 the best moose habitat. Now, I am not implying that
6 the best moose habitat occurs everywhere, I am just
7 saying that if a moose is searching for good habitat
8 that's what a moose would look for.

9 Q. When you say a certain percentage of
10 the land area, what kind of land area are you talking
11 about?

12 A. Well, it would be an area that is
13 planned for moose harvest. When we look at this from a
14 wildlife biologist's point of view, we like to look at
15 it in units of about 10 kilometres by 10 kilometres;
16 i.e., a hundred square kilometres. That's a good
17 workable unit from our point of view.

18 Q. Now, you indicated earlier in your
19 evidence that the habitat portion of moose management
20 is achieved through timber management planning; is that
21 correct?

22 A. Yes.

23 Q. And that habitat that the biologist
24 is attempting to create is habitat within the wildlife
25 management unit that the biologist is responsible for?

1 A. Yes, that's correct.

2 Q. And that the wildlife management unit
3 could have two or more forest management units entering
4 into or be within its boundaries?

5 A. That's correct.

6 Q. Could you explain how moose
7 management in terms of creating habitat should be
8 approached by the wildlife biologist?

9 A. Yes, and I would like to use an
10 overhead to demonstrate a couple of important points.
11 These will be Exhibit 464 from Mr. Greenwood's
12 evidence.

13 You will recall when Mr. Greenwood
14 presented this evidence that he showed the various
15 categories by age of this particular forest and again
16 of this particular species. This is a key piece of
17 information to the wildlife biologist because, as I
18 described in moose habitat, I talked about in terms of
19 early successional stages and later stages in the
20 successional process.

21 So in working with the timber management
22 planning process, the biologist then must look at the
23 structure of the forest that he is working with on the
24 management unit that he is responsible for. So it is
25 an important piece of information to know that some

1 portion of the unit is in the older forest and then
2 what is likely to happen to that forest over the next
3 number of years. It is a key piece of information.

4 The biologist then has to make a judgment
5 call about the impact of these changes through time on
6 the wildlife population that he is trying to manage
7 for.

8 So somewhere in that process the
9 biologist should have a sense of what is happening on
10 the area with respect to the structure of the forest
11 and where the structure of the forest is likely to be
12 over the next hundred years or whatever the planning
13 horizon is. He then evaluates what the impact is
14 likely to be on the quality of habitat for the wildlife
15 that are there.

16 So in the discussions that would occur,
17 slides such as this or information such as this would
18 be an integral part of those discussions. The
19 biologist then would want to have an idea of what was
20 happening on his unit now, the moose population level
21 that's there, the projected change in forest age-class
22 composition, and then the biologist would make an
23 estimate of the impact on moose habitat that would
24 occur through that planning period.

25 Q. And should the biologist have in mind

1 a picture of the vegetative mosaic that he believes
2 would be good on the unit from a wildlife point of
3 view?

4 A. Yes, that's right. The biologist
5 would have in his mind a picture, a mental picture at
6 least or perhaps even a sketch map of what ideal moose
7 habitat is, as I described a few moments ago, and he
8 would compare that to the moose habitat that's present
9 currently and the moose habitat that might be there as
10 we move through a rotation.

11 Q. And within a timber management
12 planning process, is there any opportunity for the
13 biologist to influence where the harvest will or will
14 not be based on his objectives in relation to wildlife?

15 A. Yes, that's right. The biologist
16 would come in there with in his mind a scenario that he
17 would like to see occur, he would discuss that with the
18 planning team and advocate a certain scenario. The
19 planning team would evaluate what he had to say and
20 would try to accommodate it where they could or
21 tradeoffs might have to be made against other values
22 that were also important.

23 It may not be necessary for the biologist
24 to have ideal moose habitat everywhere. In fact, we
25 have very few wildlife management units where it is

1 imperative that the whole unit be in ideal moose
2 habitat because we can meet our targets in less than
3 the entire wildlife management unit. And if that's the
4 case, then there is room for the biologist to say:
5 Well, I will not try to produce ideal moose habitat
6 everywhere, I will approach it but I know I cannot
7 never actually reach it.

8 MR. MARTEL: How different the size are
9 the management units for a forester to consider as
10 opposed to the biologist in the wildlife management
11 units; is there a comparison?

12 DR. EULER: Maybe one of the foresters
13 could comment on that. I am less familiar with the
14 forest management units than I am with the wildlife
15 management units.

16 MR. HYNARD: Well, forest management
17 units vary in size and so do wildlife management units.
18 On my own I have wildlife management units 54, 56 and
19 part of 60. So they are smaller generally than forest
20 management units.

21 DR. EULER: Now, I have a summary here of
22 the thought process that a biologist might go through
23 when he is looking at a timber management plan and
24 trying to accommodate the needs of wildlife and I need
25 to move to this slide. It is in the witness statement

1 at page 521, Figure 1, and it is 37 in the sequence
2 there.

3 Well, it's -- yes, I will move it on,
4 Rich, that isn't -- sorry, there are spaces in there
5 and it is hard to count.

6 So this is an intent to illustrate the
7 kind of decisions that a wildlife person would be going
8 through when looking at a timber management plan to try
9 to meet the objectives of the wildlife program. So the
10 first thing that the decision-maker has to think about
11 is the objectives, to maintain viable populations of
12 flora and fauna, to meet the timber objectives that are
13 important and to approve habitats then for certain
14 selective species if it is at all possible. So that's
15 sort of the first stage in the thinking process.

16 The second stage in the thinking process
17 would be to zero in on the species that have to be
18 considered first and the first thing that has to be
19 considered is threatened or endangered species because
20 it is mandated by law that their habitat be given
21 careful consideration that it not be destroyed.

22 The second thing then would be to apply
23 the principles of featured species management, moose or
24 deer habitat management guidelines.

25 And then the third thing would be to look

1 at other species, the locally featured species or other
2 species that are of a concern for some reason in that
3 planning area. Then he would consider the implication
4 of the silvicultural system that had been employed,
5 consider which one was there and modify it if and where
6 necessary to help achieve those objectives.

7 So that's kind of a diagramatic
8 illustration of the thinking process that the wildlife
9 person would go through.

10 MR. FREIDIN: Q. Now, I think you have
11 been describing the process that they would go through
12 in terms of the habitat creation part of management; is
13 that correct?

14 DR. EULER: A. Yes, that's correct.

15 MR. FREIDIN: And perhaps we can turn the
16 lights on for a second.

17 Q. Could you turn to page 1, the first
18 green page of the Timber Management Guidelines for the
19 Provision of Moose Habitat which is Exhibit 310. Do
20 you have that document, Dr. Euler?

21 DR. EULER: A. Yes, I do.

22 Q. And we have green pages and we have
23 white pages.

24 No, if you don't have -- if you have only
25 got a xerox copy you won't have green and white. The

1 page i and ii, one page, two sides are green, the rest
2 of the document are in white pages.

3 When you refer to the Moose Habitat
4 Guidelines are you referring to the green portion or
5 the entire book?

6 A. Well, I would be referring to the
7 entire book when I use the term in that way. Now,
8 these green pages are a summary of those guidelines for
9 handy reference and they contain the essence of the
10 guidelines although some of the details are later in
11 the booklet.

12 Q. Okay. The habitat creation portion
13 of the green pages are found where?

14 A. The habitat creation portion?

15 Q. Well -- all right. There is a
16 section on the second page, specific area of concern
17 guidelines?

18 A. Yes.

19 Q. Are there subject matters considered
20 in that section which are in addition to the type of
21 habitats that you described, the early successional
22 conifer and that sort of thing?

23 A. Oh yes, yes, yes. These are specific
24 areas of concern, that's right. What I talked about
25 was the general habitat requirements of moose.

1 Now, in addition to those general habitat
2 requirements there are some very specific things that
3 sometimes have to be dealt with in a management
4 planning process. Now, specific things could include,
5 for example, a mineral lick.

6 Moose sometimes obtain some of the same
7 minerals that they get in aquatic feeding areas in what
8 we call mineral licks which is an area of certain
9 geological structure that -- certain minerals are there
10 like salt, and so the animals would go to these mineral
11 licks and actually eat some of the soil because it
12 supplies specific nutrients that they need.

13 This can be very important to a moose
14 population, and so those things would need special
15 protection in the planning process. The specific area
16 of concern guidelines list a number of specific areas
17 of concern.

18 Q. And would calving areas then
19 identified in 1(a) under the heading Specific Areas of
20 Concern Guidelines be another such area?

21 A. That's right. Calving areas where
22 they are identified are an area that we try to protect.

23 Q. Now, you indicated in your earlier
24 evidence that this document, the Moose Habitat
25 Guidelines, is a major tool used by wildlife managers

1 in providing habitat?

2 A. Yes.

3 Q. In Panel No. 7 Mr. McNicol indicated
4 that the Moose Habitat Guidelines were in some parts of
5 the province or in particular circumstances being
6 applied in too rote a fashion. Now, are you familiar
7 with him giving that evidence?

8 A. Yes, I am.

9 Q. And he indicated that as a result
10 that additional training regarding the use of Moose
11 Habitat Guidelines was desirable. Are you familiar
12 with that evidence?

13 A. Yes, I am.

14 Q. Firstly, could you describe what is
15 meant when you and Mr. McNicol refer to the Moose
16 Guidelines being applied in too rote a fashion and at
17 the same time comment on whether that situation is a
18 problematic one?

19 A. Yes, it is a problematic one in that
20 we always have a problem in an organization made up of
21 people where you give out a guideline and the fact is
22 you have somewhat different skill levels out there; you
23 have experienced employees who have been with the
24 Ministry for a number of years who are very skilled at
25 applying these guidelines and those people do a good

1 job and they don't have controversies associated with
2 what they do.

3 On the other hand, in the period when a
4 person is learning his how to be good a guideline
5 applier, they sometimes are not as skilled and that is
6 a normal part of the learning process and those people
7 sometimes apply the guidelines in too rote a fashion;
8 that is, they read the guideline and if it says
9 clearcut should be 130 hectares, there is a tendency to
10 say: Okay, clearcut should always be 130 hectares.

11 That isn't what we mean by the
12 guidelines. What we have done in the guidelines is try
13 to enunciate some general principles that have wide
14 applicability but must be modified to take into account
15 local conditions and local applications because the
16 Province of Ontario is not the same from Kenora to
17 Cochrane, it is a very different province and we have
18 to apply those guidelines differently over that vast
19 expand of area. You simply could never make a
20 guideline that always applied everywhere, it just would
21 be impossible.

22 We depend then upon our people to take
23 the principle and apply it effectively. Sometimes,
24 particularly when people are young and learning the
25 ropes, they tend to be a little too mechanical in

1 applying the guideline and what we have to constantly
2 do is improve and work on our training program and
3 that, I think, is what Mr. McNicol was referring to
4 when he talked to them being applied in too rote a
5 fashion.

6 Q. Now, does too rote an application
7 cause concern to the Ministry because of a potential
8 effect on wildlife management as a result of that kind
9 of approach?

10 A. Sometimes, but that would not be the
11 biggest concern.

12 Q. And what would the biggest concern
13 be?

14 A. The biggest concern would be, for
15 example, the effect on industry of applying the
16 guidelines in a way that was too restrictive and that
17 unnecessarily cost them money where it should not cost
18 them money.

19 So the Ministry has -- attempts to
20 develop this middle ground between applying them
21 appropriately but not too strictly but strict enough
22 and, in the end, you start with science and you have a
23 base of science but then the actual application also
24 has a component of art in it. So it is a mixture at
25 its best -- our best people apply a mixture of science

1 and art and then that produces our very best results.

2 Q. Can you just give me an example of
3 the situation where a perhaps too mechanical or rote an
4 application of the guideline might work a hardship on
5 the forest industry?

6 A. Well, for example, supposing a
7 harvest was planned in an area that was essentially a
8 are large jack pine sand flat, very similar in
9 structure for a large area and if the Ministry insisted
10 that this be broken up into cuts of 100 to 130
11 hectares, that will be too rote an application, as it
12 is not good moose habitat to begin with, the change --
13 the harvest and breaking it up in a cut would not be
14 that helpful to moose. So even though it followed a
15 guideline in the very strictest sense of the word, it
16 really wouldn't be helping us attain the objectives
17 that we are trying to attain.

18 Q. I think you perhaps have alluded to
19 this but let me ask you specifically whether the
20 Ministry has responded to this concern in any ways
21 beyond the training that Mr. McNicol is going to become
22 involved in?

23 A. Mr. McNicol has, of course, conducted
24 training over the past several years and in addition he
25 will be doing some guideline co-ordination in northern

1 Ontario.

2 Q. And I understand that is a new part
3 of Mr. McNicol's responsibilities?

4 A. That's right. He will be provincial
5 guideline co-ordinator and teacher of how to apply
6 guidelines effectively and then, in addition, we are
7 establishing workshops and training sessions to give
8 people more instruction and more guidance in how to
9 apply the guidelines.

10 And in these workshops we are inviting
11 industry reps to be part of it so the industry reps and
12 biologists are sitting in the same room receiving the
13 same training together to develop a common
14 understanding of how to apply the guidelines.

15 MR. MARTEL: Could I just go back to your
16 example then for a moment where you had this large area
17 you were talking about. Are you suggesting that a
18 certain section would be, let's say, a hundred hectares
19 but then somewhere else you might go beyond the range
20 to facilitate--

21 DR. EULER: Oh yes.

22 MR. MARTEL: --the land forms and so on?

23 DR. EULER: Oh yes, uh-huh, clearly.

24 MR. FREIDIN: Q. Can you advise, Dr.

25 Euler, are any changes in either the application of the

1 Moose Habitat Guidelines or the documents associated
2 with their application being contemplated at the
3 present time?

4 A. Yes, there are. One of the things
5 that has happened is the Ministry has become concerned
6 that the common understanding of how to apply the
7 guidelines has not been as high as we would have hoped
8 among all our employees engaged in applying them and
9 one of the things that is happening is the Ministry is
10 going to make some efforts to have more stringent
11 reporting procedures when the guidelines are exceeded;
12 that is, if over large areas clearcuts are consistently
13 over what the guidelines suggest is good moose habitat,
14 we are putting some more reporting procedures in so
15 that the person who recommends those larger cuts must
16 write down why, what the reasons for this are and
17 submit those to the regional director who in turn then
18 can approve them or disapprove them.

19 And if this is expected to happen over
20 large areas consistently, then the Assistant Deputy
21 Minister in northern Ontario will have to give his
22 approval to that.

23 It isn't going to change the intent of
24 the guidelines and it may not change the application of
25 the guidelines but what it will change is a more

1 stringent reporting and documentation of when the
2 guidelines are exceeded and that will be in an effort
3 to monitor this process a little more closely than we
4 have in the past.

5 Q. Will it affect the discretion of the
6 biologist to make a decision to exceed or to choose a
7 size of cut, for example greater than that which
8 perhaps is referenced in the guidelines, if he believes
9 that it is justified?

10 A. No, it wouldn't change his discretion
11 or his ability to do that. The change is he will have
12 to be more -- he will spend more time writing down why
13 he did that.

14 Q. Now, if I could refer you back to
15 Exhibit 310 which are the Moose Guidelines and, in
16 particular, page ii on the right-hand side of the page
17 the heading Application of Guidelines.

18 If I could direct you to the last
19 paragraph, it states in part:

20 "If cuts are proposed which exceed the
21 general guidelines over large areas, the
22 district must receive the regional
23 director's approval prior to agreeing to
24 the plan."

25 And is there some further refinement or definition of

1 what over large areas means in terms of when a
2 reporting requirement would arise?

3 A. Yes, that is being refined. It was
4 deliberately left fairly vague in these original
5 guidelines to give people more options in terms of what
6 they could decide. However, the change is going to be
7 that if the guidelines are exceeded by more than two
8 times, the exceptions will be specifically listed in
9 the timber management plan and in areas where the
10 exemptions above result in the guidelines not being
11 applied to 60 to 80 per cent of the harvested area, the
12 approval of the appropriate Field Assistant Deputy
13 Minister will be required.

14 Q. So in terms of getting the regional
15 director's approval, that will arise where cuts exceed
16 two times the standard in the Moose Guidelines?

17 A. That's right.

18 Q. And am I correct that the intention
19 is that two times is two times 130, so you are talking
20 about cuts which exceed 260 hectares?

21 A. Yes, that's correct.

22 Q. And you indicated that the further
23 refinement or direction was -- deals with when one has
24 to obtain the approval of the Assistant Deputy
25 Minister; is that correct?

1 A. Yes, that's correct.

2 Q. And could you just repeat for us the
3 circumstances under which -- right now the guidelines
4 say:

5 "If a region intends to routinely
6 sanction deviation from the guidelines
7 the Assistant Deputy Minister's approval
8 must be obtained before approving the
9 plan."

10 And can you tell us how that particular matter has been
11 addressed or is going to be addressed?

12 A. Yes. There is a more specific
13 direction being given here so that in the new approach
14 when the guidelines are not applied to 60 to 80 per
15 cent of the harvested area in the operating plan, the
16 approval of the appropriate Field Assistant Deputy
17 Minister will be required.

18 Q. When you say the operating plan are
19 you referring to the five-year term?

20 A. That's correct.

21 Q. Of the timber management plan?

22 A. Yes, correct.

23 Q. Could you perhaps with the use of the
24 flip chart - to make sure that we all understand that -
25 explain what that 60 to 80 per cent provision is all

1 about?

2 A. Yes. So if in the area that is being
3 planned - and let's just let that represent the area
4 that is being planned - if you would look -- you would
5 divide this up and let this represent somewhere between
6 60 and 80 per cent of the area, and if the moose
7 guidelines are being applied in this area and the cuts
8 are less than two times the guidelines no extra
9 approvals are necessary.

10 So this represents 20 to 40, this
11 represents 60 to 80. So you could have a large
12 clearcut over here and you wouldn't have to report it,
13 but if your large clearcuts beyond the guidelines come
14 over into this part of the area being planned, then the
15 more stringent reporting and documentation procedure
16 kicks into effect.

17 Q. Now, on a management unit, of course,
18 you wouldn't be able to draw a line quite as neatly
19 between the two areas. If you look at those
20 percentages at the extreme, if you had -- if you
21 totalled up and looked at all your clearcuts, and 60
22 per cent of them were each 260 hectares or less, if you
23 wanted to exceed the 260 hectares in the other 40 per
24 cent of the cuts, would you need the approval of the
25 Assistant Deputy Minister?

1 A. No. Now, that is an extreme case
2 that you have outlined just to sort of illustrate the
3 extremity and the answer is no.

4 Q. And in that situation, would you
5 require the approval of the regional director?

6 A. The regional director, yes, he will
7 review this plan, he has to approve it, yes.

8 Q. Now, let's assume, Dr. Euler, that --

9 MR. FREIDIN: Perhaps, Mr. Chairman, we
10 should mark this document as the next exhibit.

11 MR. MARTEL: Can I get something
12 straight. I think I recall Mr. Armson saying there was
13 no restriction upon the size of clearcutting in the
14 area of the undertaking.

15 MR. FREIDIN: There isn't.

16 MR. MARTEL: There isn't. Okay. Now,
17 what I hear Dr. Euler saying: ah, but there is. Now,
18 can you tell us when clearcuts -- there are limitations
19 upon the size of clearcuts, is it with respect to the
20 Moose Management Guidelines or is it about deer? I
21 mean, I just...

22 DR. EULER: All right. Could I address
23 that. I wonder if we should mark this exhibit first
24 just so we don't forget.

25 MR. FREIDIN: Why don't we call it the 60

1 to 80 per cent provision.

2 THE CHAIRMAN: Exhibit 481.

3 MR. FREIDIN: Diagram depicting 60 to 80
4 per cent provision re: Moose Guidelines.

5 ---EXHIBIT NO. 481: Diagram depicting 60 to 80 per
6 cent provision re: Moose
Guidelines.

7 DR. EULER: Now, I think the key
8 difference here is that it is not -- there is no
9 restriction on clearcut size, however, it is going to
10 be tougher to have lots of large clearcuts - do you see
11 what I mean? - because we are making it harder to do
12 it. It doesn't mean you can't do it, it is just that
13 they are going to have to be justified with written
14 documentation.

15 Now, it is also very important to
16 emphasize that this is an interim solution. We are not
17 advocating that this be a solution that be in place for
18 a long period of time. It has arisen because of this
19 problem of lack of common understanding about how to
20 apply those guidelines and so we have been forced to
21 sort of bring in the parameters of flexibility.

22 We don't like it, but we feel it has to
23 be done because of the reality that we are encountering
24 out there unfortunately we have a few cases where
25 people's understanding of how to apply the Moose

1 Guidelines has not been as good as we had hoped it
2 might be. That is all normal stuff when you have human
3 beings working in this area.

4 And so the Ministry has come to the
5 conclusion that the best way to deal with it is see to
6 it that the Assistant Deputy Minister reviews these
7 situations and has an opportunity to say: Well, yes,
8 okay; or: Well, back to the drawing board once more on
9 this one.

10 Now, I don't think that takes away our
11 major point that we don't like focusing on clearcut
12 size, we really don't. But the realities are that in
13 this case we may have to spend a little more time on it
14 than we had hoped we would have to.

15 MR. FREIDIN: Q. Now, I take it the work
16 that is being done by Mr. Kennedy and others,
17 representatives of other parties who are attempting to
18 develop or come to agreement on a methodology which
19 will be the method by which you will actually measure
20 the size of the clearcut has some implications for the
21 application of this particular approach that you have
22 just described?

23 DR. EULER: A. That's right, it does
24 have implications because one of the biggest problems
25 in this whole issue of clearcut size is what is a

1 clearcut and when does a clearcut become something
2 else. And the whole process of deciding what it is so
3 that one can measure it, is a difficult process in
4 itself. And what is a clearcut, what is a contiguous
5 clearcut, how much is left, and is it still a clearcut
6 are very difficult issues.

7 And so one of the things that is
8 happening as we progress here is we are trying to come
9 to grips with how to measure exactly what a clearcut
10 is.

11 Q. Now --

12 A. Well, it just makes me want to
13 re-emphasize that I wish we could be judged by how well
14 we attain our objectives not so much on the size of our
15 clearcuts because that is simply a tool, it is a means
16 to getting somewhere else, and I wish we could be
17 judged by how are we doing on managing moose, how are
18 we doing on ensuring that habitat is available for
19 black-throated green warblers.

20 Q. Now, when we look at the Exhibit 481
21 and this provision in relation to 60 to 80 per cent,
22 let me use an example that perhaps is not as extreme
23 Dr. Euler.

24 Firstly you have indicated that
25 management for moose has spinoff benefits for

1 approximately 70 per cent of the other invertebrate
2 species in the forest?

3 A. For the vertebrate.

4 Q. Vertebrate, sorry. Let's assume that
5 in a situation that you look at your clearcuts and
6 let's use the same example 60 per cent are okay, now
7 you can exceed the 260 on 40 per cent of your area.

8 What if someone said if you exceeded the
9 260 over in that other 40 per cent of the area, what
10 about all the critters that benefit as a result of
11 moose management, are they somehow going to be
12 adversely affected?

13 A. Well, we have got to monitor that.
14 We can't just walk away and say everything is okay and
15 that is why we have got that monitoring program in
16 place.

17 Now, my judgment is that we don't have to
18 produce ideal moose habitat over the entire landscape
19 in order to meet our objective of viable populations or
20 of moose populations because moose are not everywhere
21 in the province and neither are the other species.

22 So if we apply the Moose Guidelines
23 within the twice limit that we are talking about over
24 at least 60 per cent of the managed area, in my view,
25 we have a very very good chance of ensuring that our

1 populations of wildlife are viable and of meeting our
2 moose targets.

3 THE CHAIRMAN: That is assuming though
4 that you get the right mix though; isn't it, that you
5 are not clearcutting in the areas where the moose are
6 and not exceeding by more than the 260 hectares in the
7 areas where the moose aren't?

8 DR. EULER: That is part of the
9 assumption but it is also important to remember that
10 normal timber management operations often provide good
11 habitat for many wildlife species. It is just wrong to
12 assume that timber management activity is destroying
13 habitat because it isn't, and most of the time, over
14 most of the province it does a good job of preparing
15 habitat for wildlife.

16 The problem comes when we get into these
17 difficult exceptions and special circumstances and then
18 it becomes very very hard.

19 A jack pine sand flat, for example, that
20 is harvested by fire is something that wild animals
21 have always coped with and to harvest it by a chain saw
22 is not too much different from the wild animal's point
23 of view. Okay. So in that case the big clearcut is
24 not that upsetting to the spruce grouse that lives
25 there because the spruce grouse has always coped with

1 it and that is the normal that is harvested.

2 Now, the tendency is in most cases when
3 other kinds of timber are harvested, the topography or
4 something tends to break up the cut. Now, I know there
5 are some difficult examples and there are some specific
6 places where we have to apply management effort, but it
7 is important to remember that in many cases over much
8 of the province normal timber management produce good
9 wildlife habitat.

10 MR. FREIDIN: Q. Now, you have indicated
11 Dr. Euler, that the reason for these provisions that
12 you have just described, the situation for reporting
13 when you exceed 260 hectares in terms of your clearcut
14 size and the need for approvals -- certain approvals
15 when you don't fall within the 60 to 80 per cent
16 provision were put in place or are being introduced
17 because there is not at the present time a common
18 understanding of how to approach this subject of
19 application of the guidelines?

20 DR. EULER: A. That's correct.

21 Q. Now, you said that the reporting
22 requirements were interim in nature?

23 A. That's correct.

24 Q. What do you mean by interim and, more
25 particularly, when will -- or what must happen before

1 that interim period will come to an end and, therefore,
2 these reporting requirements are contemplated to be
3 removed?

4 A. Well, we hope that they can be
5 removed in approximately two years when we would
6 anticipate that we can do an adequate job of getting a
7 common understanding developed among our people.

8 We will know when that happens when we
9 review timber management planning and we review the
10 process of producing wildlife habitat in the course of
11 timber management planning. And there is an on-going
12 review process by the regional staff who look at
13 district management plans and the process is such that
14 the regional wildlife biologist, for example, can go to
15 a district look at the plan and he can make some pretty
16 good judgments about what is happening. And so it is a
17 review process and when we see a common understanding
18 develop, which we hope will be in about two years, then
19 we can begin to back away from this interim solution.

20 THE CHAIRMAN: Is it contemplated, Dr.
21 Euler, that we are going to assist in that kind of
22 final solution with this Board's decision?

23 DR. EULER: I would expect the Board
24 would have a role to play.

25 THE CHAIRMAN: I guess what I am asking

1 effectively is: Is this going to be, for instance, one
2 of the areas that the Ministry would be addressing in
3 suggested types of conditions of approval?

4 MR. FREIDIN: I think the subject
5 matter -- we're in the midst of development. I can't
6 tell you right now exactly how this particular matter
7 will be addressed. It has been considered and I think
8 I would just ask that the Board would wait until the
9 end of this panel when we have to -- before submitting
10 those.

11 MR. MARTEL: Dr. Euler, the problem faced
12 by the Ministry was that it was too restrictive the
13 application in terms of hectares, or was it too large
14 being allowed, or could you be a little more specific,
15 I think, is what I am asking?

16 DR. EULER: Yes, I can and I actually
17 have a slide later I am going to show you.

18 But I will use a specific example that
19 I'm familiar with, I will change the names because I
20 don't want to embarrass anybody. I am thinking of a
21 particular...

22 THE CHAIRMAN: Protect the innocent.

23 DR. EULER: Protect the innocent, that's
24 right. I am thinking of a particular place in Ontario
25 where a new biologist was working and the new biologist

1 was reading the Moose Guidelines, read them diligently,
2 came to a specific place on the ground in which a
3 timber management plan was envisaged.

4 Now, this biologist knew that in the area
5 there were some important pieces of moose habitat but
6 he didn't know exactly where they were. So what he did
7 is he drew a big circle around the whole area and said
8 I want no cutting in there. Well, that wasn't a good
9 solution and none of us find fault with this young
10 person because they were learning. And so what we then
11 did was we had a more experienced person go to that
12 location and just have a short discussion, education
13 session and show that person how to make some -- a
14 little better judgment based on the maps, based on the
15 information that was available and after that session
16 of educating and counselling and so on it was very
17 clear that he didn't have to draw a circle around the
18 whole area and take all of that wood away from the
19 company, by applying a little more judicious thoughtful
20 processes in fact they freed up some 70 per cent or so
21 of the wood, that the young person had tried to reserve,
22 you see.

23 And so that is what I mean, it is this
24 common understanding that you can never write down on a
25 piece of paper and say: Follow this piece of paper.

1 MRS. KOVEN: Can you remind me of the
2 number of biologists you have working in the field.

3 DR. EULER: I sure don't know. I really
4 don't know what the number is.

5 MR. FREIDIN: We'll take a look at the
6 exhibit which I think was filed during Panel 7 and see
7 whether we can get that number for you.

8 Q. Now, in that particular case you
9 indicated that a more senior biologist went out and
10 spoke to this person, I think you used the phrase sort
11 of did the showing.

12 Now, I am not suggesting in my question
13 that there are a lot of cases such as the one that you
14 just described out there, but you have made reference
15 to Mr. McNicol - John McNicol who has been a witness
16 before this enquiry - who has been assigned a
17 responsibility in relation to the application of the
18 Moose Habitat Guidelines and I believe as well the Fish
19 Habitat Guidelines?

20 DR. EULER: A. Yes.

21 Q. Now, sticking with the Moose Habitat
22 guidelines, can you describe what it is that Mr.
23 McNicol is expected to be doing, how long he is
24 expected to be doing it, and what the results are hoped
25 to be as a result of Mr. McNicol doing whatever it is

1 that you are going to describe?

2 A. Well, Mr. McNicol is one of our
3 more -- most skilled practitioners of the art of the
4 moose guideline application and he has been doing it
5 for about 12 years and he does an excellent job and so
6 what we want to do is take advantage of his knowledge
7 and his teaching ability and have him work with all of
8 our people across northern Ontario, both biologists and
9 foresters and try to impart to them more skill in
10 applying the guidelines.

11 We think that this should last about two
12 years and at the end of it we expect that we will be
13 able to see an increase in understanding by the quality
14 of the plans that are produced.

15 Q. And at the -- you indicated that a
16 reporting -- this more stringent reporting requirement
17 would cease at the end of the interim period and would
18 that be the when Mr. McNicol has in fact finished his
19 assignment as it were as this co-ordinator?

20 A. That's correct. We hope and pray
21 that it will be in the neighbourhood of two years.

22 Q. Okay. And what is it that you
23 believe you will see, or what you will be looking for
24 to tell you that it is now an appropriate time to
25 remove this requirement for this more stringent

1 reporting?

2 A. One, less concern expressed by the
3 industry. That would be, I think, a clear tangible
4 goal because when the Moose Guidelines are applied
5 properly by a skilled practitioner, we find that
6 companies and Ministry staff work out the problems very
7 very well and companies do not experience very
8 significant increase in costs. There are increase in
9 costs, I don't want to minimize that.

10 On the other hand, in the hands of a
11 skilled practitioner, those increased costs are
12 relatively low and acceptable. One of the things that
13 we find is when the Moose Guidelines are applied
14 inappropriately, we get complaints from industry. So
15 one sign that we are doing better will be fewer
16 complaints.

17 A second sign that we are doing better
18 will just be the quality and the character of the plans
19 that we see as we review them.

20 A third characteristic might be that we
21 continue on the progress of attaining our objectives of
22 both numerical and viable population.

23 Q. We began this area --

24 THE CHAIRMAN: Excuse me one second, Mr.
25 Freidin. Dr. Euler, why wouldn't you pick up a lot of

1 the improperly, if I might put it that way, applied
2 guidelines?

3 DR. EULER: In the normal course of
4 things, you mean?

5 THE CHAIRMAN: In the normal course of
6 the review process of the plans themselves. Why
7 wouldn't you have, for instance, an experienced Mr.
8 McNicol sitting there looking in terms of how the moose
9 guidelines have been applied when he is looking at the
10 draft plans to be able to say: Well, it looks like
11 they are taking out of production 70 per cent of an
12 area and they have just drawn a circle around it, I
13 don't think that's the way these should be applied,
14 therefore, I will review this one or have it reviewed
15 at that stage.

16 Why can't it be picked up on review?

17 DR. EULER: Well, ideally it should be.
18 The fact is that we just don't have that many skilled
19 practitioners in all of the places they should be. You
20 know, you have got a Mr. McNicol and there are others
21 like him.

22 And what tends to happen is then the
23 complaints don't come from those areas and
24 interestingly also, because there are no complaints
25 from those areas, they tend not to be noticed because

1 what gets noticed is the complaint areas and so we end
2 up focusing on a relatively small per cent of the
3 management effort because that's where the difficulties
4 are and the complaints are.

5 And it looks -- it can look a little
6 distorted, in fact, it isn't as distorted as it might
7 seem.

8 THE CHAIRMAN: Well, then if the plans
9 are all reviewed obviously at the district and regional
10 levels--

11 DR. EULER: Right.

12 THE CHAIRMAN: --has the Ministry ever
13 considered building in a centralized review situation--

14 DR. EULER: Process.

15 THE CHAIRMAN: --for all plans, or
16 process for all plans so that whoever sits on the
17 centralized reviewing committee are Mr. McNicols and
18 equivalent experienced practitioners of the various
19 disciplines such as a wildlife biologist, a fisheries
20 biologist, et cetera, rather than leaving it up to a
21 district manager or a regional manager who may really
22 in essence be operating with a rather inexperienced
23 wildlife biologist or fisheries biologist?

24 What I am saying is: If you are building
25 in a review process by running it through the district

1 and regional managers, is it really a viable review
2 process when they don't have the expertise themselves
3 to look at the components of what they are reviewing
4 from terms of experience?

5 DR. EULER: Well, again, I am going to
6 ask some of my forester friends to address this, but I
7 will give them a minute to think.

8 I am not aware that the Ministry has
9 proposed that because, you see, the other side of that
10 issue would be you should try to educate all of your
11 people, and rather than making a central process you
12 should try to get everybody's level of education and
13 skill up.

14 THE CHAIRMAN: Well you would do that as
15 well, it would just leave less work for the reviewer.

16 DR. EULER: Yes. Why don't we see if one
17 of my forester friends here would like to respond to
18 that.

19 MR. GREENWOOD: I would just add maybe
20 one thing before passing it over to Peter. I think
21 that the process, Mr. Chairman, of supervisors and
22 regional staff does pick up these types of things, but
23 in order to do so in this review process there, of
24 course, is an expenditure of time and effort in order
25 to pick it up.

1 And if in fact you can put a process in
2 place where you are not expending the time sorting
3 those types of things out where the regional bio and
4 the -- sorry, the local biologist and the local
5 forester are applying the guidelines in a way that they
6 are coming in in plans that don't require that type of
7 effort, then the system works smoothly.

8 MR. HYNARD: I think too that the
9 question of these things being picked up in the
10 internal MNR review of a draft management plan, yes,
11 they would be picked up. The difficulty is that they
12 are picked up late at that review date.

13 If allocations were -- allocations for
14 harvest and application of the guidelines were less
15 than desirable, to alter that management plan at that
16 late date would require tremendous effort;
17 re-allocations is a major item.

18 Of course it is essential that management
19 plans be written by local, experienced foresters with
20 the help of their biologist and the rest of the
21 planning team. To centralize that at some central
22 location would mean that you would lose those
23 advantages of having that local experienced man. You
24 would be applying guidelines by rote simply because you
25 didn't know any better, you weren't familiar with that

1 local area.

2 The training that Dr. Euler is referring
3 to is designed exactly to raise the common
4 understanding of those local practitioners. Those are
5 the people that we feel are best writing that plan, not
6 a central body.

7 THE CHAIRMAN: Well, okay. I understand
8 what you are saying and I am not criticizing in any
9 way, but there was no intention in my comments that the
10 plans wouldn't be written at the local level. We are
11 talking about them being written, formulated, discussed
12 on an integrated resource management basis at the local
13 level. It is just at the review stage --

14 MR. HYNARD: Yes. Actually there is that
15 centralized review, there is a review at the regional
16 level, there is a review at the provincial level also.
17 So that's true, those reviews do occur in that
18 centralized fashion.

19 THE CHAIRMAN: I guess all I am saying --
20 all I am suggesting is, is that at those levels if the
21 people doing the reviewing were experienced in the
22 various disciplines then you might be able to recognize
23 problems that have been generated by the local
24 employees in formulating the plans in the first
25 instance.

1 MR. HYNARD: I agree, they would
2 recognize that. The difficulty is it doesn't surface
3 until it is too late in the planning process to do
4 major rework on the plan if that was required. If it
5 was only a few words that needed changing, there
6 wouldn't be a problem; the problem is if there is major
7 harvest allocations that require change.

8 MR. MARTEL: You have to go back to
9 square one?

10 MR. HYNARD: Exactly.

11 THE CHAIRMAN: Isn't that the very
12 purpose of this review process, going all the way up
13 the line so that if there is a problem that
14 necessitates going back to square one you do it?

15 DR. EULER: Yes, yes.

16 THE CHAIRMAN: Obviously it has to be a
17 serious one or you are not going to do it, but that's
18 why you are reviewing it, otherwise why review it at
19 all?

20 DR. EULER: Yes.

21 MRS. KOVEN: But the approach of the
22 Ministry seems to be taking the kinks out of the plan
23 before -- as many as they can before it goes up the
24 line, as opposed to...

25 DR. EULER: Yes, as best we can, that's

1 right. And, see, the reality is when you have got
2 human beings they don't always make good decisions
3 every time and sometimes these decisions get quite a
4 ways up the line before it gets kicked out.

5 MR. FREIDIN: Mr. Clark, you look like
6 you want to saying something. .

7 MR. CLARK: Well, I guess I am just
8 anxious to make it clear that I think we probably -- I
9 am sure we all agree here that we have capable people
10 at the regional levels doing those reviews.

11 I think in the context of the moose
12 guidelines, for example, because it is a tool, albeit
13 it has been around in a variety of forms for a number
14 of years, it has only recently had final approval.

15 I think that what we are trying to do
16 with the exercise we are involved in now is ensure that
17 there is consistency and understanding so that those
18 people who have skills in dealing with issues related
19 to the application of those guidelines are thinking in
20 a relatively consistent way. That doesn't mean they
21 will be applied in the same way everywhere.

22 And so John McNicol's role, he is working
23 right out of the ADM's office in northern Ontario, and
24 in that instance the real interest there is ensuring
25 that we are doing this appropriately. It doesn't

1 necessarily represent a centralized review and I don't
2 think we would want to move in that direction.

3 MR. FREIDIN: Q. Dr. Euler, do you agree
4 then -- can you agree or do you disagree with Mr. Clark
5 who indicates that the people at the regional level
6 doing the reviews are experienced people that can and
7 do an acceptable review in terms of the application of
8 these guidelines?

9 DR. EULER: A. Yes, I agree that that
10 can happen.

11 Q. All right. Mr. Hynard indicated that
12 he felt that this reporting provision or strategic
13 reporting provision that you have talked about could
14 increase the understanding of certain people at the
15 local level?

16 A. Yes.

17 Q. Do you agree with that?

18 A. Yes, I think it will. That will be
19 the result. It is going to be more work, but I think
20 by discussing these things, getting them out in the
21 open, writing them down, it will increase our common
22 understanding.

23 Q. Okay. And Mr. Greenwood indicated
24 that he felt that the regional reviewer's job would be
25 much more onerous in situations where the guidelines

1 were perhaps not being applied in the proper way, if
2 the approach was incorrect there would be more work for
3 that regional reviewer in that situation than after the
4 interim period?

5 A. That's correct.

6 Q. And you would agree with that?

7 A. Yes.

8 Q. Now, we started off this discussion
9 about how biologists should approach the issue of
10 creating or providing habitat in their wildlife
11 management unit, and is the approach that you described
12 when you were indicating what a biologist should do in
13 approaching that topic of habitat creation -- is that
14 in any way going to form part of what Mr. McNicol is
15 going to be doing in his training?

16 A. Yes. Mr. McNicol will be developing
17 common approaches throughout the province to this issue
18 of habitat in timber management plans.

19 THE CHAIRMAN: Dr. Euler, I don't want to
20 sort of get involved in semantics, but is not the idea
21 of the guidelines in the first place to develop a
22 common approach throughout the province to a particular
23 problem or issue?

24 And when you find that the guidelines are
25 being applied inappropriately, does that suggest the

1 guidelines aren't worded properly in the first place?
2 If you have to develop a common approach to what I
3 thought was a common approach in the form of the
4 guidelines in the first place --

5 DR. EULER: Guidelines to the guidelines.

6 THE CHAIRMAN: Guidelines to the
7 guidelines.

8 DR. EULER: I understand what you mean.

9 THE CHAIRMAN: Where do you end up?

10 DR. EULER: That's right. See, the
11 problem is -- the problem is it is not a simple world
12 out there. You cannot write a guideline that everybody
13 can read and apply and do it the same way; it is
14 impossible.

15 And the Ministry -- Ontario is different
16 in Cochrane than it is in Kenora, and all you can do is
17 write the very best general guideline that you can and
18 it is true most of the time in most of the province.

19 THE CHAIRMAN: So what do you need then,
20 a specific -- like another instructional guideline for
21 a specific area like Kenora or Cochrane? Let's say
22 apply this guideline in Kenora in this fashion--

23 DR. EULER: Well, that's right.

24 THE CHAIRMAN: --and then we will go to
25 somewhere else?

1 DR. EULER: Right. That would be the
2 other way and then, you see, you are so burdened with
3 guidelines that you need a truck when you leave the
4 office just to carry your guidelines and that's
5 inappropriate. It just won't work.

6 So what we try to do is have a general
7 guideline and then depend on the professionalism of the
8 person to interpret it and, furthermore, this brings us
9 back to this point: Don't judge us by how we apply
10 those guidelines; judge us by how we manage the moose
11 because we will manage them differently in different
12 parts of the province. Judge us by how we attain our
13 objectives.

14 This whole argument leads us down a road
15 that is non-productive. Are we making the moose we
16 said we would make? Is that the right number of moose
17 to make? That's what we should be judged by, not by
18 some artificial rule about guidelines.

19 MR. MARTEL: When the guidelines first
20 came out, Dr. Euler, were there opportunities or were
21 there seminars or were there instructions for --
22 because this was a new manual to work from, was there
23 any effort made by MNR to ensure that there was
24 consistency in application?

25 DR. EULER: Well, we had a number of

1 seminars. Mr. McNicol, for example, every year for the
2 past seven or eight years has developed a course in
3 which he tried to do that. The problem is, of course,
4 if you get a new person in who hasn't had the course
5 and it may take eight or nine months before the course
6 comes up again and he can take it, in the interim, that
7 person has to make decisions.

8 MR. MARTEL: Are the courses compulsory
9 or...

10 DR. EULER: No, they weren't compulsory,
11 but there was high attendance because people wanted to
12 go to them.

13 MR. FREIDIN: Q. Now, we are talking
14 about -- let me go back to this discussion you had
15 right at the beginning when you talked about having two
16 six guns. You said you had the habitat six gun and you
17 had the population six gun?

18 DR. EULER: A. That's right, and I am
19 quick draw artist as well.

20 Q. Right. And you said you had the guns
21 since about in the early 80s when this moose policy
22 came about?

23 A. That's right.

24 Q. And you indicated there was a problem
25 back in the late 70s with population?

1 A. That's right.

2 Q. Now, can you tell me, were you using
3 one of those guns more than the other in the first part
4 of the 1980s?

5 A. That's right. We were using the six
6 gun entitled restrict the hunters, and those are where
7 the bullets came from in that first period. We put
8 massive restriction on hunters.

9 And Mr. Martel I think is quite aware of
10 some of the complaints that are -- that's right, and we
11 have been very tough on hunters and a lot of hunters
12 think that we have been unfair. We have done it
13 because we feel responsible for the resource and the
14 moose are responding.

15 Now, the next six gun that we are trying
16 to start firing now is habitat because over the longer
17 term we have got to have the habitat to match the
18 population and these are the growing pains that we are
19 experiencing as we try to put that habitat six gun into
20 play.

21 MR. MARTEL: Did you answer the letters,
22 Dr. Euler?

23 DR. EULER: Some of them I did. Some of
24 them, oh my God.

25 MR. FREIDIN: Q. All right. But what I

1 am getting -- what I would like to know is: While you
2 were shooting off your population six shooter in the
3 early 80s, were you doing it at the expense of leaving
4 your habitat gun in its holster?

5 DR. EULER: A. Well, no, no. We were
6 trying to do what we could. We knew that the most --
7 we were going to get the most impact immediately with
8 our population control six gun and so that was the
9 emphasis, but the other six gun was not in the holster,
10 we were working at it and we continue to work at it.

11 Q. But the population was getting the
12 emphasis?

13 A. That's right.

14 Q. And when in the process did the
15 habitat start to get the emphasis?

16 A. Well, it is a gradual thing. These
17 guidelines were given official approval in February of
18 '88 I think and over the years then there has been more
19 emphasis on the habitat and that's why we are getting
20 into more problems recently, is because now that we
21 have achieved a lot of results with the population
22 control mechanism, now the issues of habitat are coming
23 to the fore and we are struggling with them. Before it
24 didn't make that much difference because we were
25 getting gains with the other approach.

1 THE CHAIRMAN: Mr. Freidin, it is almost
2 time for high 'T' I would think.

3 MR. FREIDIN: Well, I am looking at my
4 notes and we haven't got a hope of making it by the end
5 of tomorrow if we proceed through my pages at the rate
6 that I am going. So I think it would be -- it is time
7 for high 'T'.

8 THE CHAIRMAN: I think we have put in a
9 reasonable day, so I think we will adjourn.

10 MR. FREIDIN: Just one matter just so we
11 don't lose sight of it. Ms. Blastorah has found the
12 information I think that Ms. Koven would like.

13 MS. BLASTORAH: Mr. Chairman, Exhibit 365
14 which was filed during the evidence of -- I believe it
15 was during the cross-examination of Panel 7 was an
16 interrogatory of the Ontario Federation of Anglers &
17 Hunters, their Question No. 1, and as part of that
18 answer a large fold-out table was provided which gave
19 information on classified and unclassified positions
20 and tenure of current incumbents for selected positions
21 in districts in areas of the undertaking.

22 Now, Mrs. Koven asked specifically about
23 the number of biologists employed by the Ministry, but
24 I am afraid the answer isn't quite that simple.

25 The table lists a number of categories

1 which would contain people who would be involved in the
2 types of decisions we were discussing and who may be
3 actually biologists but not listed as such here because
4 that is not their current position.

5 So maybe I could just point you to the
6 appropriate columns that you might like to consider.
7 The first one would be fish and wildlife supervisors
8 and the chart indicates there is currently a total of
9 32.5. I believe that indicating someone holding two
10 positions.

11 MRS. KOVEN: Rounded off.

12 MS. BLASTORAH: The second column would
13 be biologists acting in that position, the total being
14 47.

15 THE CHAIRMAN: It couldn't be half a
16 person holding one position.

17 MS. BLASTORAH: Well, given budget
18 constraints...

19 The next column would be fish management
20 officers for a total of 25; next would be wildlife
21 management officers, total of 22; and finally, fish and
22 wildlife technicians, a total of 55.

23 One last column that could or could not
24 have some input would be conservation officers,
25 sometimes being biologists you might have occasion to

1 be involved in this type of work, and there are
2 currently 151.5 conservation officers. I guess that
3 person is the other half of the other person.

4 THE CHAIRMAN: Thank you.

5 MS. BLASTORAH: That was Exhibit 365.

6 MR. FREIDIN: 8:30 tomorrow?

7 THE CHAIRMAN: Very well. 8:30 tomorrow
8 morning. Thank you.

9 ---Whereupon the hearing adjourned at 5:20 p.m., to be
10 reconvened on Thursday, March 30th, 1989 commencing
at 8:30 a.m.

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